Assessing the Impact of Microenterprise Services (AIMS)

Clients in Context:

The Impacts of Microfinance in Three Countries

Synthesis Report

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Assessing the Impact
of Microenterprise Services (AIMS)
Management Systems Interantional
600 Water Street, S.W.
Washington D.C. 20024-2488
Tel: 202 484-7170 • Fax: 202 488-0754
E-mail: aims@msi-inc.com

CLIENTS IN CONTEXT: THE IMPACTS OF MICROFINANCE IN THREE COUNTRIES

SYNTHESIS REPORT

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Submitted to:

Monique Cohen, Ph.D.
Office of Microenterprise Development
Global Bureau, USAID

Submitted by:

Donald R. Snodgrass
Harvard University
Jennefer Sebstad
Management Systems International

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EXECUTIVE SUMMARY

Microfinance is an attractive development strategy for a wide spectrum of actors, combining values of market-driven service provision, entrepreneurship, self-help, and aid to the poor. The potential for reaching and assisting large numbers of households on a sustainable basis made microfinance a popular development investment in the 1990s. Today there are thousands of microfinance programs established with the benefit of development funding.

Funders continue to experience increasing pressure to prove that their investments in microfinance have reached the poor and helped to alleviate their poverty. USAID undertook to answer this challenge by commissioning longitudinal impact assessments. Three parallel field studies, undertaken in Peru, India, and Zimbabwe, sought to answer a number of outstanding questions about impact:

- Who benefits from microfinance?
- How do clients benefit from microfinance?
- Are benefits concentrated within the enterprise, or do they spill over into the household?
- Are benefits experienced differentially within the household?
- Are certain types of clients likely to benefit more?
- How do clients use microfinance services within the larger context of the household economy and within the existing environment of opportunities and constraints?

These studies were designed in the context of ongoing debate over impact assessment methodologies. A key persistent problem is "selection bias." Because clients are self-selected as well as selected by the programs themselves, program participants may differ systematically from non-clients. Therefore, differential outcomes may be attributable to differences among people, rather than to program participation as such. Controversy also surrounds the fungibility of credit in the form of cash. Funds borrowed for one stated purpose may be used for something else entirely. Some critics argue that measurement problems such as these invalidate the findings of impact assessments. While both "selection bias" and "fungibility" may constrain the analyst in attributing client changes directly to program participation, they need not limit conclusion-drawing concerning the strong association between factors.

These questions and methodological issues led to an AIMS research design based on a conceptual framework that relates microenterprise to people's lives, both as individuals and as members of households and communities. The household economic portfolio model recognizes that loans are fungible and that individuals, especially women, may be empowered by participation in a microfinance program. By including impacts at the household, enterprise, and individual levels, the model captures a full range of changes in the economic welfare of clients and their households over time.

Three microfinance institutions (MFIs) were studied: SEWA Bank in India; Accion Communitaria del Peru/ Mibanco in Peru; and Zambuko Trust in Zimbabwe. By sharing a common set of hypotheses at the household, enterprise, and individual levels, the individual studies provide a unique opportunity for cross-country comparison. Participation in microfinance services is posited to increase household economic welfare, promote enterprise stability or growth, and empower clients, especially women. Related hypotheses were identified at each level, along with relevant impact variables.

AIMS conducted surveys of clients and matched non-clients at each site with two years intervening. For small samples of clients, in-depth case studies were carried out. The studies considered the intensity of program participation as measured by length of time in the program, number of loans taken, or use of other financial and non-financial services. Studies also investigated how individual client, enterprise, or household characteristics, such as gender, marital status, enterprise type, enterprise location, household dependency ratio, or household poverty level, affect changes in particular impact variables. To help ground the research design and interpret the findings, each field study includes a review of physical, economic, and social context factors that may affect clients, programs, and impacts. Such factors include high inflation, increasing poverty levels, the HIV/AIDS pandemic in Zimbabwe, regulatory restrictions and socially defined occupational segmentation in India, and economic and political crises and structural adjustment in Peru.

Clients for each sample were chosen at random from client lists kept by the MFIs. Non-clients were selected by methods intended to make them as comparable as possible to program clients. Differences among the programs are reflected in population samples. The Indian sample included current borrowers (clients with loans outstanding), savers (clients with savings accounts but no current loan), and non-clients.

A strength of the study is the mixed method approach which combines survey and case study data. The survey data provide information on the direction and size of impacts, while the case study data provide insights into the processes by which these impacts occurred. The survey panel data comprise respondents who could be interviewed in both rounds. These data were analyzed quantitatively. Each country analysis examined the question of whether the inability to re-interview some of the respondents from Round 1 introduced response bias. In each case, the conclusion was that no significant bias was introduced by sample attrition. The data analysis plan included: (a) descriptive tables for Rounds 1 and 2; and (b) two types of statistical analysis, gain score analysis and analysis of covariance (ANCOVA). Case studies in all three sites covered small groups of program clients. These case studies included an analysis of the resources and activities, and the financial and risk behavior or selected client households and their enterprises.

KEY FINDINGS

Impacts on Households

Two of the three studies demonstrated positive impacts on the levels of household income (total and per capita). None of the studies showed any impact on girls' education. Beyond that, there is little commonality across countries (see Table ES1).

The *Indian* study found strong household-level impacts. Household income (total and per capita), expenditure on housing improvements, expenditure on consumer durables, and school enrollment for boys were all positively affected.

In *Zimbabwe,* there were positive impacts on income diversification for departing clients, but not for continuing clients.[1] The study also found positive impact on the ownership of some durable assets for continuing clients. The enrollment ratio of boys was boosted. There were positive impacts on the consumption of meat, fish, chicken, and milk for extremely poor households.

In *Peru*, there were fewer household-level impacts than in India and Zimbabwe. Among the positive impacts were household income (total and per capita) and intergenerational launching.[2] Microcredit also helped client households diversify their income sources. Clients on average experienced more shocks than non-clients and those who did experience shocks were more likely than non-clients to sell assets to cope with them. However, this is a very small group.

Table ES1: Summary of Household Level Findings

Household income level (total and per capita)	Positive impact in India and Peru.
Household income diversification	Increased diversification in Zimbabwe and among the poor in Peru. No impact on diversification of either borrowing or saving in India.
Housing improvements and durable goods purchases	Positive impact on both housing and durable goods among repeat borrowers in India. Positive impacts on durable goods but not housing in Zimbabwe.
School enrollment for boys	Positive impact in India and Zimbabwe.
School enrollment for girls	No Impact.
Private expenditure on children's education	Negative impact among new entrant households in Peru.
Expenditure on food by the poor	Some positive impact for Peru and Zimbabwe. Slight impact for repeat borrowers in India.
Ability to cope with shocks	Small positive impacts in India. Small negative impacts in Peru.

All three studies found that participation in microfinance programs helps extremely poor households meet basic needs and protect against risks. In Zimbabwe, there were significant positive impacts on the ability of clients to send boys to school and to purchase nutritious foods. While the Peru study found that impacts on poor clients are generally consistent with those for the full sample, microcredit helps poor client households to maintain their desired levels of greater diversification. However, poor clients were more likely to turn to (negative) asset-reducing strategies than poor non-clients when faced with a financial shock.

Impacts on Enterprises

Participation in a microfinance program might be expected to increase the revenues, fixed assets, and employment of the primary enterprise operated by the borrower.[3] However, fungibility provides a compelling reason for searching more widely. By enlarging the pool of household resources, loans can lead to increased

1 In Zimbabwe, Round 1 clients who had taken one or more loans since 1997 were termed "continuing clients," while those who had ceased to borrow from Zambuko were called "departing clients" .

2 Intergenerational launching refers to the setting up in business of entrepreneurs' children and other young family members.

3 Primary enterprise refers to principal microenterprise of the respondent. For borrowers, it generally refers to the enterprise for which credit has been requested as well.

expenditure in a number of areas beyond the primary enterprise. Borrowers may opt to invest in other household enterprises or, alternatively, they may not invest in microenterprises at all. Additional resources may go to improve housing, buy durable goods, or for other household purposes. Non-enterprise impacts can also be expected when MFIs choose to lend for a variety of stated purposes, not just for enterprise development.

AIMS assessed impacts on microenterprise revenues, fixed assets, employment, and transactional relationships (see Table ES2).[4] Revenues and fixed assets were examined separately for the respondent's primary enterprise and for up to three microenterprises in the household. Because many Indian respondents did not run microenterprises, but worked as wage laborers or sub-contractors, the study also considered impacts on income from all informal sector activities.

Table ES2: Summary of Enterprise Level Findings

Enterprise net revenue	No impact on primary enterprise revenue. Positive impact on household's combined enterprise revenue in Peru and India; also total informal sector income in India.
Enterprise assets	Positive impact on assets of client's primary enterprise in Peru. No impact on combined enterprise assets in any site.
Enterprise employment	Positive impacts in India and Peru.
Enterprise transactional Relationships	Some impact in each location, but the nature of the impact varies from place to place.

Enterprise-level findings are generally weaker than might be expected. Weak impact in India can be attributed in part to a number of contextual factors. Since SEWA Bank regards enterprise development as only one possible justification for extending credit, its activities might be expected to have less impact at the enterprise level and more at the household and individual levels. Likely explanations include over-crowding in Ahmedabad's informal sector and the socially constrained occupational segregation that affects SEWA Bank's exclusively female clientele. Although India and Gujarat both experienced economic growth and average household income rose within the survey's sample, business opportunities for women in Ahmedabad's informal sector did not improve. The impact of borrowing from SEWA Bank may also have been limited because the single credit instrument offered by the Bank failed to meet the business needs of some SEWA members.

More enterprise-level impact was found in Peru, despite the recession that occurred during the assessment period. These findings may be attributed to the goal of ACP/Mibanco, which is lending for microenterprise development. In Zimbabwe, where Zambuko Trust also focused on enterprise lending, extreme economic adversity may have limited the measured impact. Clients in Zimbabwe were more likely to sell in other towns, to extend credit to customers, and to keep business records.

All studies found less impact on the respondent's primary enterprise than on household microenterprises in general. This suggests that borrowers exploit the fungibility of microcredit to increase the combined profits from all enterprises associated with their household economic portfolios and frequently use the additional resources provided by borrowing for purposes other than enterprise development. Case study informants indicate that microfinance resources devoted to enterprise development are often used to increase working capital, permitting entrepreneurs to hold larger inventories, buy in bulk to take advantage of lower input prices, and thereby increase sales.

4 Transactional relationships refer to the ways in which microenterprises conduct their businesses, particularly the sources of their purchased inputs and the types of customers to which they sell goods or services.

Impacts on Individuals

At the individual level, the AIMS studies focused on aspects of empowerment, especially of women. An important dimension of empowerment is the ability of people to participate in decisions that affect their lives. The studies explored the proposition that by increasing an individual's ability to contribute economically to the household, participation in microfinance programs strengthens their control over household resources, self-esteem, and ability to deal proactively with the future.

Analysis at the individual level drew more heavily on the case studies than the survey findings. Many issues related to control over resources, self-esteem, and preparedness for the future are hard to capture in survey data. Therefore the case studies played an important complementary role in assessing the role of credit and savings in increasing these aspects of women's empowerment.

Across the three studies, many respondents already reported high levels of participation in decision-making, self-esteem, and sense of preparedness for the future. Women took an active, sometimes dominant, role in decisions to take a loan, use the loan, and use microenterprise profits. While many women (one-third to two-thirds in the studies) make these decisions independently, married women commonly make them jointly with their husbands. In no case did women forfeit their role in decision making during the study period.

The AIMS studies find that women are empowered, not only through the process of making independent decisions regarding loans and enterprise profits, but also by participating more actively with their husbands and other household members in joint economic decisions. This challenges previous findings that male household members are more likely to control these decisions, while women must assume the responsibility and pressure to repay loans. The case studies suggest that where women can lose out and become more vulnerable is when independent decision-making creates high levels of intra-household conflict.

In all three countries, clients were more likely than non-clients to have personal savings. Zambuko's lending was found to have a positive impact on savings in formal financial institutions. In Peru, in the context of an overall decline in savings, ACP/Mibanco participation did not impact savings. The study revealed, however, that the overall decline in savings in the sample was due to a significant drop for men, but not for women. In India, all SEWA Bank clients have their own savings accounts while few other working class women in Ahmedabad do.

CONCLUSIONS

Overall, microfinance makes a difference. The use of financial services by low-income households is associated with improvements in the values of most of the impact variables specified in the AIMS hypotheses. However, there is much variability in the nature and magnitude. No single impact was found uniformly in all three countries.

Use of microfinance benefited household income in India and Peru but not in Zimbabwe. It encouraged diversification of income sources in Peru and Zimbabwe, but not in India. It led to limited increases in expenditures on household assets: repeat borrowers spent more on both housing improvements and consumer durables in India; in Zimbabwe, clients as a whole spent more on durables, but not on housing improvements.

Food consumption by the poor was positively impacted in Peru (by a small amount) and Zimbabwe, but not in India (except perhaps for repeat borrowers). Program participation promoted school enrollment for boys but not for girls India and Zimbabwe. Households in the studies, particularly those in India and Zimbabwe, suffered frequent and varied financial shocks. However, the assessments found limited impact on the ability to cope after the shocks had occurred.

Impacts on poorer clients: The studies show that people from poor households do participate in microfinance programs and benefit in a number of important ways. In the three countries, 46 percent, 4 percent, and 34 percent of the clients were below the World Bank's $1-a-day global poverty line in India, Peru, and Zimbabwe respectively at the time of the Round I survey.[5] Yet the modest impacts experienced by poorer households in the study suggest scope for improving the relevance of products and services for this group. Despite the considerable movement in and out of poverty among clients during the course of the studies, microfinance seems to have very modest impacts on the overall incidence of poverty among clients.

Gender and impact: All the programs studied were designed and implemented with high levels of gender awareness. A majority of clients in all three programs are women, so program benefits tend to go to women. Women are not a homogeneous group and the impacts they experience also vary. Most differences in impact appear to be related to differences in the enterprise types, household structure, composition of economic portfolios, and economic goals of men and women.

The use and impact of microfinance in managing risk: The AIMS studies document various ways in which low-income urban households use credit and savings to manage risk. Important strategies to protect against risk ahead of time are income smoothing, building financial assets, and maintaining access to multiple sources of credit. Respondents in all three countries borrow mostly from informal sources at times of need. Microfinance helps protect against enterprise risks, primarily through diversification that reduces seasonal variations in income and through improvements in transactional relationships. Individuals and households use a variety of strategies to manage financial shocks after they occur. They modify consumption (cut back on food or other household expenditures), raise their income (work longer hours, mobilize additional household labor, start new business activities), or sell assets. Microfinance plays a smaller role in coping with risks after they occur than in helping clients protect against risk ahead of time.

MAJOR THEMES

1. Microfinance reaches down and benefits the poor. Microfinance serves the near-poor, the moderately poor, and even the extreme poor (households with less than $1 per day per capita in purchasing power), with similar impacts on all three groups. It helps some people escape poverty, but borrowing entails significant risk and the climb out of poverty tends to be slow and uneven.

2. Microfinance and household resources are highly fungible. Contrary to a widespread assumption in the microfinance industry that borrowers invest loan proceeds in microenterprises and repay their loans out of the additional revenue generated by these investments, the studies found that clients often use the additional resources generated by borrowing for purposes other than microenterprise development and repay

5 In Peru, a much larger percentage of clients was below the national poverty line.

their loans from various financial resources. MFIs are only one source of finance, yet they significantly broaden the range of options open to microentrepreneurs and poor households for responding to economic opportunities and coping with financial shocks.

3. **Microfinance is a valuable vehicle for empowering the poor**. By supporting and encouraging women's economic participation, microfinance helps to empower women, thus promoting gender equity and improving household well-being.

4. **Context makes a difference**. Microfinance helps microenterprises prosper and grow, but its impact varies considerably among times and places because of differences in economic, legal, and regulatory environments, as well as in the goals and structures of microfinance programs.

- The economy matters. Although impacts can occur in circumstances of recession or stagnation as well as in economic expansion, the impacts of microfinance are likely to be smaller when the economy stagnates or declines than when it grows. Even in hard times, however, there may still be *relative* benefits for clients as compared to non-clients; access to microfinance can be used defensively by microentrepreneurs.

- Program characteristics make a difference. A program that emphasizes enterprise-level development and offers loans on terms that meet the needs of its business clients can be expected to have strong impact at the enterprise level. Conversely, a program with emphasis on other lending goals may have more impact at the household or individual level.

- Length of time in the program affects the outcome. For almost all significant impacts, the magnitude of impact is positively related to the length of time that clients have been in the program.

The AIMS studies suggest several ways to increase the impact of microfinance programs. Most broadly, expanding services to more people will increase impact. An important strategy to expand outreach and reduce client turnover is to diversify the range of products and services offered. The AIMS studies highlight wide differences in the characteristics of clients, their enterprises, and the contexts in which they operate, yet the MFIs studied offer a relatively narrow range of financial products, which suit some clients better than others. Diversifying products and services and tailoring them more to the varying financial services needs of individuals, enterprises, and households could attract larger numbers of clients and provide the basis for program expansion and greater impact. In the absence of protective mechanisms such as insurance and social benefits, microfinance often bears a heavy load. Development of these complementary systems would enhance the capacity of microfinance to make a positive difference in people's lives. Also worthy of consideration are the addition of business and management training, the provision of housing loans, and the introduction of voluntary savings programs, insurance, and emergency loans.

Some of these changes have already been made by the MFIs as a result of their participation in the AIMS impact study.

- SEWA Bank has introduced a one-day loan to meet the credit needs of vegetable vendors, will offer a special savings account designed to pay for marriage expenses, and has started a financial literacy program to help SEWA's members improve their personal financial management.

- The findings of the study informed the process of new product development following ACP/Mibanco's transformation to a full service bank and improved Mibanco's understanding of its clients, their poverty levels and financial needs.

- Zambuko Trust has introduced a compulsory savings program for borrowers, which it hopes will improve loan security and enhance clients' ability to cope with financial shocks. Zambuko Trust has also started a very short-term loan program for its best clients to help their clientele survive seasonal variation in the demand for their products, and is pilot-testing an emergency loan to help clients pay school fees and medical expenses. Loan insurance has been introduced to cover the outstanding loans of clients who die. Finally, Zambuko Trust is considering the possibility of introducing housing loans.

I. INTRODUCTION

Microfinance is an attractive development strategy for a wide spectrum of actors, combining values of market-driven service provision, entrepreneurship, self-help, and aid to the poor. The potential for reaching and assisting large numbers of poor households on a sustainable basis made microfinance a popular development investment in the 1990s. Today there are thousands of microfinance programs established with the benefit of development funding.

By 1995, when the AIMS project began, the microfinance field had experienced both a rapid growth in the number of programs and a strong push for sustainability.[6] Six years later, a small number are financially sustainable. Some have been transformed from non-governmental organizations (NGOs) into formal financial institutions, including banks. In addition, a small number of commercial banks are testing the water as they explore the potential for going down market.

The field is now at a crossroads. The maturing of the microfinance sector has brought a number of critical challenges. These include rising client dropout rates, evidence of limited outreach to the extremely poor, and debates about whether microcredit may encourage poor clients to take on detrimentally high levels of indebtedness, rather than reducing their poverty. It is also increasingly clear that credit by itself will not catapult people out of poverty. There is growing recognition of the importance of a full range of microfinance services (savings, insurance, money transfer services) and non-financial business development services, along with other types of policies, programs, and institutional and regulatory factors.

Since the early 1990's, funders have come under increasing pressure to prove that their investments in microfinance have reached the poor and helped to alleviate their poverty. The United States Agency for International Development (USAID) believed it could answer this challenge by undertaking longitudinal impact assessments. Three parallel field studies, called core impact assessments, were designed to meet this challenge and answer a number of outstanding questions about impact:

- Who benefits from microfinance?
- How do clients benefit from microfinance?
- Are benefits concentrated within the enterprise, or do they spill over into the household?
- Are benefits experienced differentially within the household?
- Are certain types of clients likely to benefit more?
- How do clients use microfinance services within the larger context of the household economy and within the existing environment of opportunities and constraints?

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6 The AIMS Project is a technical resource of the United States Agency for International Development (USAID). The goal of the project is to gain a better understanding of the processes by which microenterprise services strengthen businesses and improve the welfare of microentrepreneurs and their households, and to strengthen the ability of USAID and its partners to assess the results of their microenterprise programs. Additional information about the AIMS Project can be found at <www.mip.org/componen/aims.htm>.

Since that time, the agenda around clients has broadened, making information on clients and impacts more relevant than ever. There is greater emphasis on:

- *Clients as the "user end" of microfinance:* Attention is being paid to how clients use microfinance, how it fits into their individual and household financial management strategies, how it compares to other formal and informal sources of finance available within communities, and what financial products and services clients want and need.

- *Demand-driven products and services:* There is a push for more demand-driven products and services. The "supply-led" approach, with its "provider knows best" attitude about what clients need and want, is being challenged by a new discourse around more appropriate and flexible products for different market niches.

- *A wider view of microfinance for household resource management:* The new consensus sees microfinance as financial services for the poor, rather than credit for enterprise development. This approach considers who the clients are and how they use lump sums of money (credit, savings, insurance, gifts, or other forms) to meet individual and household needs, manage risk, deal with emergencies, and take advantage of opportunities when they present themselves.[7]

- *"Deepening" the outreach of microfinance to very poor clients:* With the tendency for microfinance clients to be concentrated around the poverty line and the limited outreach of microfinance services to extremely poor clients (those 50% or more below the poverty line), the appropriateness of credit as an intervention for very poor microentrepreneurs has generated questions. The emerging debate focuses on how the design of products and services can be improved to better meet the needs of the extremely poor.

- *The use of financial services to manage risk:* Reducing vulnerability is now seen as a dynamic and important part of any poverty reduction strategy. The use of finance – formal and informal borrowing, saving, and insurance – including microfinance, is widely recognized as an important strategy that poor people use to manage risk, protect against downward economic pressures, and reduce their vulnerability.

- *The limits of microfinance, by itself, in reducing poverty:* While microfinance is not a magic bullet to eliminate poverty, it is nevertheless an important weapon in the fight against poverty.

One effect of these trends has been to broaden the audience for impact assessments. Beyond the traditional alliance of the academic and policy worlds, interest has grown within the practitioner community. No longer satisfied with being the object of donor-driven impact assessments, practitioners have become active players,

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7 Stuart Rutherford articulated this simple but powerful concept in an influential essay, *The Poor and their Money* (Rutherford 2000). Rutherford's perspective provides a foundation for designing products and services that are appropriate for the poor. It has helped nudge the microfinance industry to focus more on the "user end" of financial services and a wider range of potential products and services.

interested in understanding client behavior. Some MFIs with objectives related to education, nutrition, and gender equity now use impact data to measure success in achieving their social missions. They want to know whether microfinance is an effective vehicle for pursuing these objectives. In this context, the questions asked by the AIMS core impact assessments are more important than ever.[8]

Methodological concerns notwithstanding, promoters and providers of microfinance generally accept that impact assessments have an important role to play operationally, not only in accounting for program investments but also in improving program effectiveness. In striving for sustainability, information on client-level impacts is increasingly useful. To be sustainable, MFIs have to attract and keep clients. To attract and keep clients, products and services have to be useful. To be useful, financial products must embody features that clients want and need. Client-level information has become critically important to providers of microfinance in their quest for sustainability. Some earlier skeptics of impact assessment have become defenders of the usefulness of impact assessment in justifying and improving microfinance programs.

When AIMS designed its longitudinal studies there had been few rigorous microfinance impact studies (Sebstad and Chen 1996). Most prior studies tried to answer the question of whether microfinance positively benefits clients. Their findings showed that:

- microfinance programs reached the poor but also involved large numbers of non-poor;
- impacts varied among different groups of poor people;
- social and economic context factors, as well as the degree of "exposure" to the program in terms of cumulative borrowing and length of time in the program affected impact (Hulme and Mosley 1996); and
- microcredit played an important role in helping microentrepreneurs survive in the face of downward pressures, but by itself credit was not enough to promote sustained growth and poverty reduction.

There was also a lot of debate about methodologies for assessing the impact of microfinance programs. Some critics suggested that impact assessments are invalidated by the problem of "selection bias" or "attribution". Participants in microfinance programs choose to join the program and are also selected as clients by the program itself, while others either choose not to take part or have their applications rejected. Differential outcomes therefore might be attributable to differences among people who do or do not take part,

8 The AIMS Project has also developed a cost-effective and practical set of tools that can be used by PVOs and NGOs to track and assess the impact of their microenterprise programs. *Learning from Clients: Assessment Tools for Microfinance Practitioners (2001)* is a manual that helps practitioners evaluate their microfinance programs. Its core is a set of five assessment tools to gather information about program impacts, clients' behavior, and the satisfaction of clients with program services. The manual provides step-by-step instructions for the use of the tools, from initial planning to data collection and analysis. Versions of the manual are available in English, French and Spanish. The manual is available for free at <http://www.mip.org/componen/aims.htm>. It is also available for free at the following locations: English <http://www.seepnetwork.org/english-aims.html>; Spanish <http://www.seepnetwork.org/spanish-aims.html> ; French <http://www.seepnetwork.org/french-aims.html>. Hard Copies and CD Copies of Learning from Clients: Assessment Tools for Microfinance Practitioners can be ordered and purchased at <http://www.seepnetwork.org>.

rather than to participation in the program as such. Another commonly cited problem is "fungibility". Households may use funds borrowed for one stated purpose (e.g., for fixed investment in a particular microenterprise) for some other purpose. Furthermore, additionality and substitution make it hard to be sure what specific expenditure is being financed by a given loan. Some critics go so far as to conclude that these problems invalidate impact assessment altogether.

In a review of methodologies for impact assessment intended to "prove impact" and "improve practice," David Hulme (1997) described a range of methods that could be used, depending on the relative importance of these two objectives and the time and resources available. Conceding that attribution and fungibility are key problems for impact assessment studies, Hulme concluded that problems of attribution can be overcome by careful research design while the problem of fungibility has been exaggerated. He endorsed the household economic portfolio model used in the AIMS assessments.

Box 1: Dimensions of Poverty and the AIMS Core Impact Assessment Indicators

	World Development Dimensions of Poverty	Core Impact Assessment Indicators
Opportunity	Income, assets, and opportunities through which people can obtain their material requirements	Household income, household and enterprise assets, sources of income, housing tenure, enterprise growth, and employment generation
Capabilities	Welfare and embodiments of human capital with implications for people's ability to raise their economic living standard	Education of children, nutrition status/food expenditures, skills and knowledge that enable people to raise their living standard. This dimension also relates to important gender dimensions within the household
Vulnerability	Exposure of individuals and households to risks or shocks that cause financial stress	Financial shocks and coping strategies
Empowerment	The ability of people to participate in decisions that affect their lives, especially their economic lives	Participation in decisions on whether to borrow, how to use loan proceeds, and how to use increased revenues that result from borrowing; improved savings behavior; increased self-esteem and respect within household; enhanced ability to prepare for the future

The research design for the AIMS core impact assessments is based on a conceptual framework that relates microenterprise to people's lives and regards people both as individuals and as members of households and communities (Chen and Dunn 1996).[9] As a basis for studying microfinance impacts, this household economic portfolio model recognizes that loans may be secured for a particular enterprise but the loan or the profits from the enterprise may be used outside that enterprise. It also recognizes that individuals, especially women, may be empowered by participation in a microfinance program. By broadening the analysis to include impacts and impact variables at the household, enterprise, and individual levels, the household economic portfolio model captures a full range of changes in the economic welfare of clients and their households over time.[10]

Inevitably, the development priorities that framed the original design of the core impact assessments have evolved. The emerging client agenda in microfinance has given new meaning to impact studies. There is more willingness to look inside the "black box" of impact assessment to learn about changing client behavior and who is left out. The AIMS framework sought to address the question "does microfinance make a different in people's lives?" Although assessing the impact of microfinance on poverty alleviation was not the primary objective of the studies, the study design generated data that can inform the current discourse on poverty. The design of the core impact assessments permits an analysis of the multidimensional view of poverty. As seen in Box 1, the AIMS research hypotheses and indicators can be classified into the four dimensions of poverty spelled out in the *World Development Report 2000/2001: Attacking Poverty* (World Bank 2000).

9 The framework views individual microenterprises and other economic activities as embedded in a household economic portfolio. The household economic portfolio has three components: (1) a set of human, physical, and financial resources; (2) a set of production, consumption, and investment activities; and (3) the circular flows between household resources and household activities. The model recognizes that credit and other resources are fungible within the portfolio of household activities. Furthermore, it recognizes that household members make choices regarding the allocation of resources in relation to options and tradeoffs within the overall household economic portfolio. The household model provides a basis for understanding impacts in relation to broader household goals and strategies to achieve economic security, reduce risk, and improve family well-being. At the same time, it recognizes that there may be negotiation, bargaining, and even conflict among individuals within the household. It further sees the household as a permeable unit, rather than a bounded unit, that is part of wider social units, networks, and processes. Finally, it recognizes that there is enormous variability in household composition, structure, and functions, both between and within societies and over time.

10 In the AIMS framework, a *household* is defined as a single person or group of persons who usually live and eat together, whether or not they are related by blood, marriage, or adoption. The individuals recognize each other as members of the same household. Included in this definition are persons who are not living there full-time because they are away at school. *Microenterprises,* following the USAID definition, are very small informally organized business activities (not including crop production) undertaken by poor people. They are further defined as having ten or fewer employees, including the owner-operator and any paid or unpaid workers.

II. THE AIMS LONGITUDINAL STUDIES

This report provides an integrated summary and analysis of the findings of three longitudinal studies on the impact of microfinance services. These core impact assessments form a set of methodologically rigorous studies of the impacts of participation in the programs of three microfinance institutions (MFIs).[11] In selecting microfinance programs to include in the assessment, the research team chose programs in three different

Box 2: Research Hypotheses for the Core Impact Assessments

Improvements in household economic welfare	Enterprise stability or growth	Empowerment of individual clients
Participation in a microfinance program is expected to lead to: • An increase in the level of household income. • Greater diversification in sources of household income • An increase in household assets, including improvements in housing and addition of appliances and means of transport, and business fixed assets. • An increase in expenditures on children's education. • An increase in expenditures on food, especially among the very poor. • An increase in the household's effectiveness in coping with shocks.	Participation in a microfinance program is expected to lead to: • An increase in microenterprise net revenue. • An increase in enterprise fixed assets, especially among repeat borrowers. • An increase in the paid and unpaid employment generated by the enterprise. • Improvements in the transactional relationships of the enterprise.	Participation in a microfinance program is expected to lead to: • Increased control over resources, specifically increased participation in decisions about the use of loan funds and income generated by microenterprises. • Improvements in the pattern and incidence of personal savings. • Increased self-esteem and perceived respect from other household members. • More proactive behavior in dealing with the future.

geographic regions (Asia, Africa, and Latin America) that were operationally sustainable or on their way to achieving operational sustainability. The MFIs selected for the study were:

- SEWA Bank in India, which was studied by a research team from Harvard University.

- Accion Communitaria del Peru (restructured as Mibanco during the course of the study), which was studied by a team from the University of Missouri.

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11 The separate studies are available as the following AIMS Reports: Martha A. Chen and Donald Snodgrass, ***Managing Resources, Activities, and Risk in Urban India: The Impact of SEWA Bank;*** Elizabeth Dunn and J. Gordon Arbuckle Jr., ***The Impacts of Microcredit: A Case Study from Peru;*** and Carolyn Barnes, ***Microfinance Program Clients and Impact: An Assessment of Zambuko Trust, Zimbabwe.*** These documents, along with all the other AIMS Publications are available for free in the AIMS Publication Section of <www.mip.org/componen/aims.htm>.

- Zambuko Trust in Zimbabwe, which was studied by Management Systems International (MSI).

AIMS research at all three sites was guided by a common set of explicit hypotheses concerning impacts of using microfinance services at the enterprise, household, and individual levels. Participation in microfinance services is hypothesized to have positive impacts by increasing household economic welfare, promoting enterprise stability or growth, and empowering clients, especially women. Related hypotheses were identified at each level (see Box 2).

Each country study adapted this core set of hypotheses to fit the context of the program and the clients. In addition, each study included other hypotheses specific to its context.

- In India, the assessment analyzed the impacts of saving by including in the sample SEWA Bank clients who where savers but not borrowers. It also assessed the impact of SEWA Bank on clients who do not have enterprises by including in the sample of SEWA Bank clients members who are sub-contract workers or casual laborers.

- In Peru, the study considered the impacts of ACP/Mibanco credit on intergenerational launching and on entry into the business registration and taxation system.

- In Zimbabwe, where there is a high incidence of HIV/AIDS, the study looked at the impact of microfinance on assistance offered to persons outside the household, either as cash gifts or in kind.

The research design also accounts for factors that moderate impacts. For example, the studies consider the intensity of program participation measured by length of time in the program, number of loans taken, or use of other financial and non-financial services. They also ask how individual client, enterprise, or household characteristics, such as gender, marital status, type of enterprise, location of enterprise, household dependency ratio, or household poverty level contribute to or inhibit change in a particular impact variable. Finally, to help ground the research design and interpret the research findings, each field study includes a review of the physical, economic, and social context factors affecting or potentially affecting clients, programs, and impacts. Such factors include high inflation, increasing poverty levels, and the HIV/AIDS pandemic in Zimbabwe, regulatory restrictions and socially defined occupational segmentation in India, and economic and political crises and structural adjustment in Peru.

In Section III of this report, the contexts, program structures, and clienteles of the three programs are compared. Section IV briefly describes the research methodology, while Section V summarizes the main findings. In Section VI, some emerging themes are identified. Finally, Section VII draws out implications for improving the impact of microfinance programs.

III. THE CONTEXT OF THE THREE STUDIES

Historically, microfinance impact assessments have assumed that 'a loan is a loan is a loan' when it comes to impact on the poor. Little attention has been given to the significance of context variables as they affect the impact of microfinance. When the AIMS longitudinal studies were designed, there was general agreement that context – factors related to the economic, social and physical environment, program design and structure, and characteristics of clients, their enterprises and households – has an important influence on the impacts of microfinance. However, there was little consensus on which contextual factors were critical and more specifically, how they would affect impacts. Up to that point, and even subsequently, there was limited comparative research on the impacts of microfinance to guide the formulation of impact hypotheses on the influence of context. The challenge was to study variables in context across three settings and come up with meaningful conclusions about the difference that certain contextual factors make.

The approach taken by AIMS was to include a review and documentation of factors considered to have some bearing on clients, their enterprises and households, and microfinance institutions in each longitudinal study and to use this information to assist in the interpretation of the findings. While the AIMS studies do not include specific hypotheses on how contextual factors influence impacts, the assessments do include a review of contextual information considered important in understanding impact paths, as discussed below.

A. THE SOCIAL AND ECONOMIC ENVIRONMENT

The social and economic settings of the three studies differ substantially. India, the world's second most populous country, is home to 40 percent of the world's poor. Its economy has expanded fairly rapidly in recent years, but the impact of economic growth on the poor is extensively debated. Peru, a far richer country, has high levels of economic and social inequality and has been unable to sustain rapid economic growth. Zimbabwe was well off by African standards (but had a highly unequal income distribution) when it gained independence with majority rule in 1980. By the late 1990s, however, its economy had plunged into freefall. Table 1 shows some of the most important statistical differences among these three countries.

Income per capita and poverty

Peru is a middle-income economy with estimated per capita income of $2,440 in 1998. Zimbabwe and India are low-income economies, with per capita incomes of $620 and $440 respectively (1998). The domestic price level is higher in Peru; adjusting for differences in purchasing power, Peru is only 68 percent richer than Zimbabwe and twice as rich as India.

In 1997, 44 percent of Indians lived below the $1-a-day poverty line and 86 percent were below the $2-a-day poverty line (World Bank 2000, pp. 280-281). Some 425 million people lived below the $1 line and 829 million people below the $2 line. Only 133 million Indians, 14 percent of the population, were non-poor by the $2 standard.

In Peru, 16 percent of the population lived below the $1 poverty line and 41 percent were below the $2 line in 1996. Although dollar-a-day poverty was fairly rare, much of the population consumed $1-2 worth of goods and services daily. About 3.7 million people lived below the $1-a-day poverty line and 9.9 million people below the $2 line. In sharp contrast to India, nearly 60 percent of the Peruvian population was non-poor by the $2 standard in 1996.

In Zimbabwe in 1990-91 (the latest year for which income distribution data are available), 36 percent of the population consumed less than $1 a day while 64 percent consumed less than $2. Approximately 3.6 million people were below the $1 line and 2.7 million were between $1 and $2 a day. About 3.6 million people (36 percent of the population) lived above the $2 poverty line. By the time of our study, however, poverty had risen considerably and was continuing to go up as a result of economic decline, social disruption, and HIV/AIDS.

Population density

India is far more densely populated than either Peru or Zimbabwe, both in rural and in urban areas.

Table 1: Socioeconomic Indicators for India, Peru, and Zimbabwe (1998)

Indicator	India	Peru	Zimbabwe
Population (millions)	980	25	12
Population Growth Rate (annual %)	1.8	1.7	1.9
Population per square kilometer	330	19	30
Urban population (% of total)	28	72	34
Life expectancy at birth (years)	63	69	40
Fertility (births per woman)	3.2	3.1	3.7
Infant mortality rate (deaths in first year per thousand live births)	70	40	73
Female literacy (%; age 15+)	43	84	83
Male literacy (%; age 15+)	67	94	94
GNP per capita, current prices	440	2,440	620
GNP per capita, purchasing power (1998)	2,060	4,180	2,489
GNP growth rate (annual %)	13.2	-1.6	4.6
Inflation rate (annual %)	13.2	7.2	31.8
Foreign aid per capita ($)	1.63	20	24
% Population under $1/day poverty line*	44	16	36
% Population under $2/day poverty line*	86	41	64

*Refers to 1997 for India, 1996 for Peru, and 1990-91 for Zimbabwe. Source: World Bank

Health and life expectancy

In Peru, life expectancy averaged 69 years in 1998. India, despite its poverty, had extended life expectancy to 63 years. Zimbabwe's life expectancy peaked at 57 years in 1990 but fell to 40 years in 1999 because of HIV/AIDS. About 25 percent of the Zimbabweans aged 15 to 49 are HIV-positive.

Literacy

In Peru and Zimbabwe, nearly 85 percent of females above the age of 15 are literate. India has a poor record in female literacy, with a figure of just 43 per cent. Indian men are also less likely to be literate than men in Peru or Zimbabwe (Table 1).

Economic growth

India's economic growth accelerated in the 1990s, largely as a result of policy reforms undertaken early in the decade. At the time of AIMS fieldwork, this growth was beginning to flag, but it still reached 6.2 percent in 1998. The Peru and Zimbabwe studies were conducted in hard times. Peru's economy fluctuated during the 1990s. During the AIMS study, GNP shrank in 1998 and stagnated in 1999. Zimbabwe's GNP has declined since independence. Although it rose 4.6 percent in 1998, growth stopped in 1999 and turned negative thereafter.

Inflation

Inflation is present in all three environments. Indian prices rose in recent years as consumer subsidies were cut and the operating deficits of the central and state governments swelled. Despite a history of severe inflation, Peru experienced the least inflation at the time of the studies. In Zimbabwe, inflation accelerated from 32 percent in 1998 to 70 percent in 1999.

In sum, Peru is more developed than India or Zimbabwe. India is the poorest country per-capita and the most densely populated. Yet India experienced fairly rapid economic development in the past decade while economic development in Peru was tenuous and Zimbabwe retrogressed.

The local settings for the three programs also differed.

Ahmedabad, India

The Indian study site is a city of nearly four million and the commercial center of Gujarat State. Once home to many integrated textile mills, Ahmedabad has faced the closure of these mills since the late 1960s. Newer economic activities include numerous smaller "powerlooms" as well as small and medium scale enterprises in diamond cutting, chemicals, and other industries. Hundreds of thousands of men and women compete in the urban informal sector. Ahmedabad's population is 80 percent Hindu, with a large Muslim minority. Muslims and Hindu "Scheduled Castes and Tribes" are strongly represented because these groups were recruited by the textile mills. Muslim and high-caste Hindu women (unlike low-caste Hindus) customarily do not work outside the home. Large numbers of them therefore operate from home as microentrepeneurs or dependent sub-contractors. Relatively secure salaried jobs are scarce and held mainly by men. Both men and low-caste women work as casual laborers in construction and other activities.

Lima, Peru

The national capital is a city of seven million whose residents are divided between *Criollos,* coastal people of primarily European descent, and *Serranos*, primarily indigenous, originally mountain-dwelling people, who migrated to Lima over the past 60 years. These immigrants invaded empty lands in and around Lima and established the informal settlements that now house more than half the urban area's population. Discriminatory laws, regulations, and social barriers repressed immigrants' efforts to establish formal businesses and forced them to operate small businesses outside the law. Cutbacks in public sector employment and stagnant private formal sector employment pushed more people into the informal sector. Microenterprises are common in all sectors of the urban economy.

Zimbabwe

This study covered three urban sites: Greater Harare, which is Zimbabwe's capital and largest city, with 1.2 million population in 1992, and its main commercial and manufacturing center, including nearby Chitungwiza; Bulawayo, the second city of Zimbabwe and a gateway to South Africa; and Mutare, a small city on the border with Mozambique. The pre-1980 trade boycott against the former white regime created a protected import-substitution manufacturing sector. Despite later liberalization, investment has been sluggish and formal sector job creation slow. Restrictions on business formation and operation, once severe, were loosened during the 1990's. Employment in micro and small enterprises in urban areas is estimated to have increased by 52 percent in 1991-98. However, many small firms have faced severe difficulties and earned low rates of return as a result of inflation, social disruption, and economic decline. The percentage of Micro and Small Enterprises (MSEs) managed by women has fallen as more men have entered the informal sector and some traditional women's activities have declined.

Inflation and Enterprise Dynamics in Zimbabwe

- In an inflationary environment, microentrepreneurs in Zimbabwe have to be pro-active to attract customers and maintain the real value of enterprise net revenues. Clients adjust in various ways, often by diversifying their products or beginning a new enterprise.

- With inflation, a household's loss of regular wage or salaried income can put even more economic pressure on its enterprises to sustain the household. Enterprise net revenue may be used to meet immediate household consumption needs rather than to invest in longer-term improvements.

- The negative economic climate appears to contribute to a general trend of diversification of income sources, including wage jobs and rental income. On average, the ratio of enterprise net revenue to total household income decreased between 1997 and 1999.

B. Program Structure and Design

Features of program structure and design include the range of financial services offered, savings, loans, and insurance; loan terms and conditions, and non-financial services offered (for example, business training offered by Zambuko Trust, and SEWA's union organizing and health programs). Just as the settings of the three studies differ considerably, so do the structures of the respective microfinance programs. This section highlights major structural features of the three programs.

1. SEWA Bank

The Indian study examined the credit and savings programs of SEWA Bank in Ahmedabad. This cooperative bank is a sister institution of the Self-Employed Women's Association (SEWA), a trade union that advances the interests of low-income women working in the informal sector. SEWA provides a range of development services and launches "struggles" to help these women gain a collective voice while improving the welfare and economic security of their families as well as their personal economic and social positions.

Savings, not loans, are the core financial service of SEWA Bank. Four savings products are offered: current deposit accounts, savings accounts, fixed term deposit accounts, and recurring deposit accounts, which require regular deposits for specific purposes. SEWA members are encouraged to save regularly, even if the amount is small.

> The Self-Employed Women's Association (SEWA) was established in 1972 as a trade union of women who run small businesses, carry out subcontracting work, or sell their labor. With a current membership of 215,000 women, SEWA is the first and largest trade union of informal sector workers in India. SEWA's objectives are to increase the self-reliance and the economic and social security of its members by organizing them into trade organizations and cooperatives. SEWA Bank is one of several sister institutions associated with SEWA. The financial services it provides are part of a range of services that SEWA offers to its members, including housing, child care, legal aid, education, and training services.

Depositors may borrow from the Bank. Most loans are unsecured – guarantors provide moral security – made for a three-year term, have a 30,000 rupee ($538) ceiling, incur interest at 17 percent per annum, and require monthly repayments. In 1999 a five-year housing loan was added. Funded by a low-interest loan from an Indian government agency, housing loans accrue interest at 14.5 percent. In FY99, 86 percent of repayments due from borrowers were made on time. Another 3 percent were less than three years overdue, while 11 percent were overdue by 3-5 years. In an effort to reduce the overdue rate, SEWA has formed a team to help borrowers improve their financial management and repay their loans.

SEWA Bank loans are not solely, or even principally, intended to finance microenterprise. General loans are offered for five approved purposes: working capital, acquisition of assets, home repairs, housing, and debt consolidation. The Bank also provides loans for social purposes such as illness and education but not for celebrations. The list of loan purposes reflects the needs of SEWA members. Because many do sub-contracting or sell their labor rather than run microenterprises, not all need working capital. Many of them work from their homes, so housing loans can be a key to business expansion and sustainability.

2. ACP/Mibanco

Founded in 1969, Accion Communitaria del Peru, an affiliate of Accion International, shifted its focus to microentrepreneurs in 1982. The program grew steadily until 1986, then suffered a sharp reversal as a result of hyperinflation and structural adjustment in Peru. ACP survived the crisis by streamlining itself, operating with a minimal staff and a small number of clients. In 1993 it entered a phase of dramatic expansion. In May 1998, while AIMS fieldwork was underway, ACP became Mibanco ("My Bank"), a private commercial bank.

Over the study period, ACP/Mibanco offered only working capital loans that ranged in size from approximately $100 to a maximum amount determined on an individual basis. Loan terms were typically for six weeks to four months, with a maximum of one year. Payments were due on a weekly, biweekly, or monthly basis. Interest rates started at 50 percent annually and were based on market rates. Daily late fees were assessed on delinquent payments.

Mibanco began as Acción Comunitaria del Perú (ACP). Founded in 1969, it began with community development projects focusing on community organization, community education, urban infrastructure and homebuilding, and small business technical assistance. The mission of ACP was to promote the development of the segment of the Peruvian population that has the most limited resources. Since 1982, ACP has focused on supporting microentrepreneurs through the provision of financial services.

Solidarity group credit has been the dominant loan modality in ACP's history. A solidarity group consists of two to five people, at least one of whom owns his or her own home. Group members are self-selected and co-sign for loans. They distribute the loan proceeds and collect payments among themselves. Individual loans, which represented slightly more than half of all loans by the time of the study, are offered with or without a co-signer. Individual borrowers must either be homeowners themselves or persuade a homeowner to co-sign for them. Solidarity group loans have declined in popularity among borrowers because of their transaction costs and inflexibility, as well as the growing reluctance of borrowers to depend on the repayment performance of others.

ACP/Mibanco lends to entrepreneurs in all sectors, but in 1997 some 80 percent of its clients had commercial enterprises. The typical client was a woman who sold staple groceries (*abarrotes*), either from her home or from a market stall. Other commercial sector clients sold produce, meat, clothing, shoes, or small electronics. Eleven percent of clients were in the service sector, pursuing activities such as the sale of prepared foods, transportation, shoe repair, appliance repair, beauty salons and barbershops. Industrial sector entrepreneurs make up only nine percent of ACP/Mibanco clients and engage in production activities such as carpentry, sewing, shoemaking, and artisanship.

3. Zambuko Trust, Harare, Zimbabwe

Zambuko Trust was established in the early 1990s by a group of Zimbabwean business, community, and church leaders. Its objectives are to facilitate the expansion of microenterprises, create employment opportunities within the microenterprise sector, and promote the transition of informal enterprises to formal status. It provides loans, training in business practices and administration, and on-going business support services. It seeks to ensure that women are equal recipients of loans and services.

Zambuko began as a legally licensed moneylender in February 1992. Over the years, its organizational structure and geographic coverage changed to reflect expansion of the program, lessons learned, and adoption of best practices in the microfinance industry. By 1997 Zambuko had six branch offices in Harare, five in Bulawayo, and seven more in smaller towns. By 1999 there were 25 branch offices under five regional offices.

> Zambuko Trust, a partner in the Opportunity International Network, was started by a group of Zimbabwean business, community and church leaders who joined together in 1990 to establish a microenterprise lending organization. Zambuko, which means "bridge" in Shona, provides loans, training in business practices and administration, and on-going business support services to clients. Its objectives include facilitating the expansion of microenterprises, creating employment opportunities within the microenterprise sector, promoting the formalization of microenterprises and ensuring that women are equal recipients of loans and services.

Initially loans were provided to individuals, but in 1995 Zambuko began making group loans. By late 1996 the policy was to make new loans only to groups of 5-10 members and restrict individual loans to repeat clients. At an initial half-day orientation session prior to receipt of the loan, the requirements were explained and basic management practices encouraged. Later, however, individuals within a group would pay their installments and the group guarantee was not strictly enforced. After being in a group scheme, a client might request and receive an individual loan. Outside the Harare region, there was resistance to group loans and Zambuko therefore continued to lend to individuals who would pledge a non-essential asset and have a co-guarantor.

Zambuko offers three loan products:

- *Individual loans* require a personal guarantor and the pledge of a movable asset. The borrower must attend a half- day training session prior to formal application for a loan.

- *Group loans* are made to self-selected groups of 5-10 members, each of whom must pledge a movable asset and attend a half-day training session.

- *Trust Fund* loans, aimed at poorer women (and since 1999 at poor men), have been made to groups of 10-30 microentrepreneurs since 1998. Members are expected to attend weekly one-hour training sessions for eight weeks prior receiving a loan and bi-weekly meetings thereafter. Trust Fund loans are generally for a six-month term, whereas the other loans are normally for 9-12 months. All loans are repaid in monthly installments.

Growth in Zambuko's loan portfolio since 1996-98 was accompanied by a rise in delinquency. Measures have been taken to reduce delinquency, including stricter enforcement of the group co-guarantee. As inflation has accelerated in Zimbabwe, Zambuko has raised interest rates on all loans, reaching 45 per cent in August 1999.

C. Client Characteristics

SEWA Bank's clients are all women who work in Ahmedabad's informal sector and belong to the SEWA Union.[12] SEWA members and their families may open savings accounts at SEWA Bank. To access an unsecured loan, a SEWA member must be at least 18 years old, have had a savings account for at least six months, have saved regularly, and be recommended by SEWA staff.

SEWA promotes cooperation among women of all religions and castes. Three-quarters of those in the client sample for the study are Hindu; nearly all the rest are Muslim. Forty-six percent of the Hindus are from "backward" castes and 40 percent are from "scheduled castes and tribes". Only 14 per cent are upper-caste. Clients average 38 years of age and nearly 90 percent are married. Sixty per cent have been to school for some period of time. Respondents' households average six members, three of whom are income earners.

Forty-five percent of the clients in the sample operate enterprises, mostly in the trade and service sectors. Another one-third are sub-contractors while most of the rest are casual laborers. Altogether, the clients' primary activities generate one-third of the total income earned by their households.

SEWA Bank clients, while not among the very poorest people in India, subsist at quite a low living standard. Household income averaged just $1,116 per year in 1998. Among borrowers, 39% lived in households where consumption per capita was less than $1 per day. Another 42% had purchasing power in the $1-2 range, leaving only 19% non-poor by the World Bank's global poverty measure. Savers in the sample who did not have an outstanding loan when the study began were even poorer. More than half of them (53%) were in the below-$1 group, 35% in the $1-2 group, and just 12% were above $2 per capita per day.

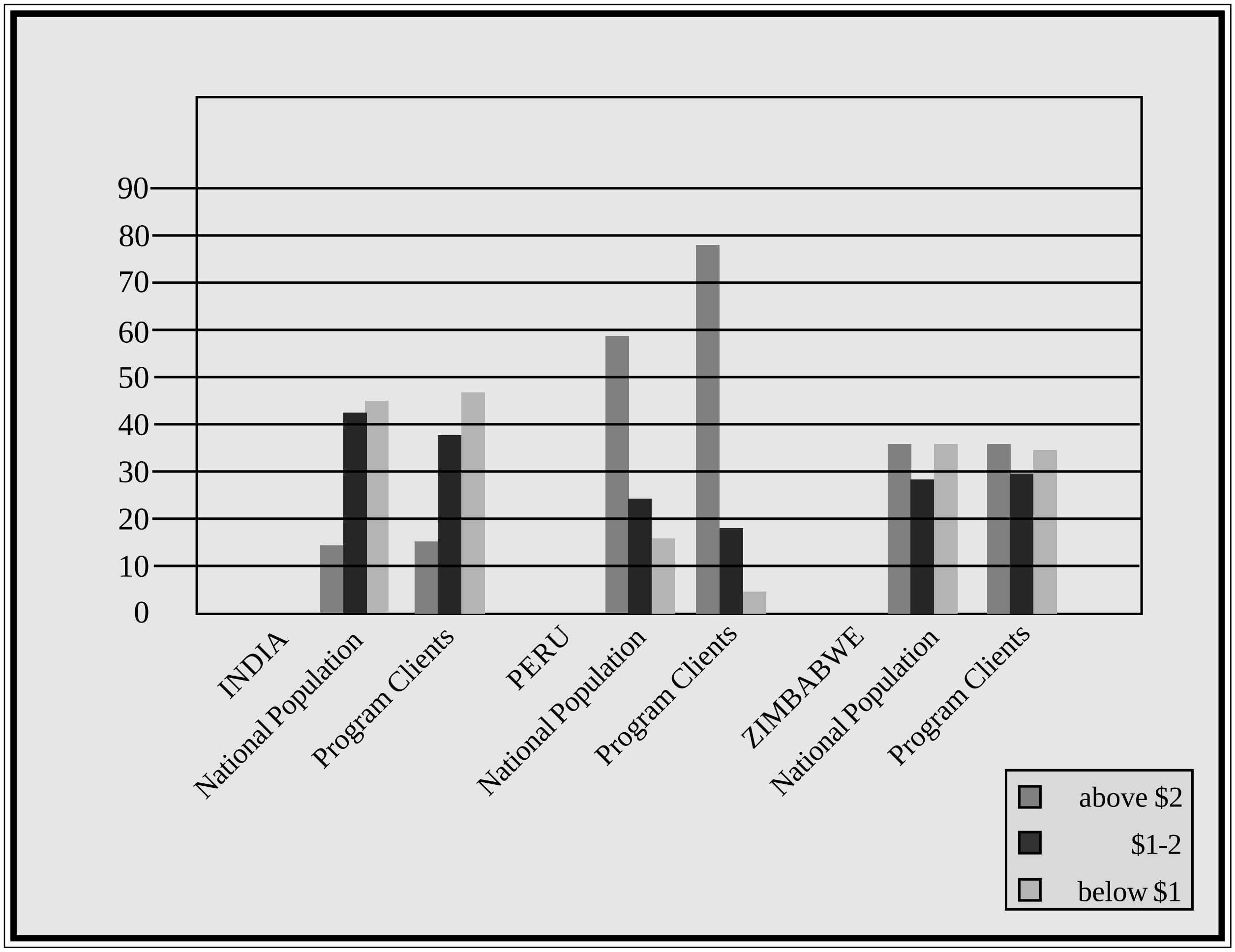
SEWA clients suffer frequent economic shocks. In the 1998 survey, 72% of SEWA Bank clients had experienced at least one shock during the previous two years. Households deal with shocks by reducing food consumption, working longer hours, putting their children to work, borrowing money, mortgaging or selling assets, or using savings. Financial services may help them avoid having to give up productive assets as a means of adjustment.

In June 2000, ACP/Mibanco had 47,000 active clients. In the previous two years, the Bank had disbursed 242,000 loans with an aggregate value of $134 million. Sixty-two percent of the clients included in AIMS survey were female. Clients' average age was 43. Eighty-four percent were married. Their households averaged five members, three of whom were economically active. Since ACP/Mibanco lends exclusively to microentrepreneurs, each household had at least one microenterprise.

Average annual household income for ACP/Mibanco clients was about $9,100 in 1997, far higher than in India or Zimbabwe. Fewer of ACP/Mibanco's clients appear to be poor than the average for the Peruvian population. Applying the World Bank's global poverty line, 78% of clients consumed goods and services worth more than $2 per day. Another 18% were in the $1-2 range, while a mere 4% consumed less than $1 per day. Comparing the poverty group distributions of clients with the distributions for the respective national

12 Minor exceptions are middle-class women who are permitted to take secured loans by pledging jewelry or other property and staff members of SEWA Bank. These groups are excluded from the study.

Figure 1: Poverty Group Distributions for National Population and Microfinance Clients Studied (percent total in each poverty group)



Sources: World Bank 2000; Barnes 2001; Chen and Snodgrass 2001; Dunn and Arbuckle 2001.

populations cited earlier, we see that while SEWA's clients are approximately representative of the national population (as are Zambuko's, see below), ACP/Mibanco's clients had significantly higher average income than the Peruvian population as a whole.[13] This is shown in Figure 1.

Female clients of ACP/Mibanco are particularly likely to be active in commerce, while men dominate the smaller industrial and service sectors. Men often select mobile service activities such as taxi driving, which can be incompatible with women's child-rearing responsibilities and is perceived as unsafe or unsuitable for women. The average client's microenterprise employs 2.3 workers, predominantly family members.

Initially, the Zambuko Trust of Zimbabwe sought to serve both men and women. However, the superior repayment record of female clients prompted a strategic decision to target women. At the time, female entrepreneurs were preponderant in Zimbabwe.

13 The gap narrows if a national poverty standard is applied. Data from the 1997 LSMS indicate that 35.5 percent of Lima residents were poor by the national standard, compared to 48.9 percent in other urban areas and 64.8 percent in rural areas. By this standard, 73 percent of Mibanco clients were non-poor, compared to 64.5 percent of Lima residents.

During the assessment period, microentrepreneurs and their families had to deal with a relatively high rate of inflation and high and rising HIV prevalence. Clients interviewed in the AIMS survey averaged 41 years of age in 1999 and had 7-8 years of education. More then two-thirds of them were married, but the level of widowhood was relatively high. The average household had 5.9 members, 2.3 of whom were economically active. Eighty percent of respondents operated enterprises in their homes.

Illness and death are particular concerns in Zimbabwe. Although Zimbabweans are reluctant to talk about HIV/AIDS, more than two-thirds of Zambuko clients surveyed in 1999 said they had experienced one or more financial crises in the past 24 months due to illness or death.

Households get income from microenterprises, salaried or wage employment, rental property, casual labor, and remittances. Wage employment and rental income are more reliable. In 1997, 52 percent of the client households had one or more wage earners and by 1999 this share had declined to 48 percent. Nearly 40 percent of respondent households earned income from rent. Microenterprise income was approximately two-thirds of reported household income and 35% of client households earned 95% or more of their total income from microenterprise in 1997. Income from this source fluctuates, so diversification of income sources is attractive. Thirty-six percent of client households had three or more household income sources in 1997; by 1999 this share had risen to 51%.

Average annual household income among Zambuko clients in 1997 was equivalent to $4,606 while non-clients averaged $3,057. Thirty-four percent of program clients were poor by the $1-a-day standard while 30% consumed in the $1-2 range, leaving 36% non-poor. As Table 2 shows, this distribution of households among poverty groups was similar to the estimate for all of Zimbabwean society in 1990-91. Since poverty has worsened since 1990-91, Zambuko clients may be somewhat better off than the general population.

IV. RESEARCH METHODS

This section briefly describes the methods used to collect and analyze data for the AIMS field studies. More detail is available from the respective country reports and in Dunn (2002).

Before the research team developed the AIMS methodology, a survey was conducted of 32 previous impact assessment studies (Sebstad and Chen 1996). The AIMS methodology reflects the findings of this review. The following are its key features:

- The research was based a conceptual framework that views the microenterprise as embedded in the household economic portfolio.

- Data collection and analysis were designed to test a set of impact hypotheses at the enterprise, household, and individual levels.

- A mixed method approach was followed, combining survey and case study data. The survey data provided information on the direction and size of impacts, while the case study data provided insights into the processes by which these impacts occurred.

- The study was longitudinal. Surveys were administered in 1997 and 1999 and the case studies took place in 1998 and 1999.[14] Respondents who could be interviewed in both rounds of the survey were tracked over time, resulting in a panel data set.

- A formal protocol was followed for the case studies, resulting in the assembly of a case study database. This includes tape recordings and written transcripts of all interviews.

- Survey data were analyzed using a variety of statistical techniques. These included ANOVA tests, t-tests, chi-squared tests, gain score analysis, multiple linear regression, probit analysis, and analysis of covariance (ANCOVA).

Preliminary research undertaken at each field site aimed to develop a better understanding of the local context, refine the set of hypotheses, select the most relevant impact variables, identify a local survey firm to assist in the data collection, pilot test a draft questionnaire, and facilitate discussions with local informants.

Sample selection began by choosing survey areas. Geographic coverage was limited to ease survey logistics and reduce the cost of data collection. Samples of program clients and matching non-clients were then selected.

In anticipation of sample attrition between rounds of the survey, the studies interviewed more respondents in the first round of the survey than were required for subsequent data analysis. The Indian sample included current borrowers, clients with loans outstanding; savers, clients with savings accounts but no current loan outstanding; and non-clients. In Peru and Zimbabwe, samples of clients and non-clients were drawn. The

14 The Indian surveys were conducted in early 1998 and early 2000, while case study interviews took place in 1999 and 2000.

analysis for Peru identified a third group, non-clients in Round 1 who had borrowed between survey rounds, termed "new entrants." In Zimbabwe, those clients who took one ore more loans after Round 1 were termed "continuing clients," while those who had ceased to borrow from Zambuko were called "departing clients." Clients for each sample were chosen at random from client lists kept by the MFIs. Non-clients were selected by methods intended to make them as comparable as possible to program clients.

> SIGNIFICANT CHANGE?
>
> In this report, results that show statistical significance of p of <.10 (indicating more than 90 percent confidence) may be referred to as "significant" in the text.

The final panel on which the quantitative analysis was performed for India included 264 borrowers, 260 savers, and 262 non-clients, a total of 786. For Peru, the panel consisted of 529 households, including 316 client households and 213 non-clients. The analysis for Zimbabwe was based on a panel of 338 clients and 241 non-clients, for a total of 579.

Case studies in all sites covered small groups of program clients. In India, 12 borrowers were selected from each of the three most important trades in which SEWA Bank clients are active: vegetable vending; bidi, an indigenous cigarette, rolling; and garment making. In Peru, 11 clients were chosen using three criteria: length of participation, household income level, and gender. In Zimbabwe, 9 clients from the Harare area were selected in 1998 from among those who had taken or applied for a new loan since 1997.

The sample surveys conducted in each of the three county studies used a questionnaire that probed the common hypotheses plus additional context-specific hypotheses, but translated them into local terms. Local survey research organizations provided operational help with the surveys. Data from all three surveys were carefully checked, validated, and cleaned. Important information gaps or inconsistencies resulted in follow-up visits to respondents.

Quantitative analysis was conducted on sample survey data from a panel of respondents who could be interviewed in both rounds of the survey. Each of the country analyses investigated whether the inability to re-interview some of the carefully selected respondents from Round 1 introduced response bias. Although some sub-groups were more likely to drop out than others in each case, the general conclusion was that no significant bias was introduced by sample attrition.

The analysis plan for panel data from the field studies (Dunn 2002) called for a set of descriptive tables for data from Rounds 1 and 2, plus two types of statistical analysis – gain score analysis and ANCOVA (analysis of covariance). Quantitative analysis was used to test the core hypotheses about impact at the household, enterprise, and individual levels. For each hypothesis, the test investigated whether participation in the MFI significantly altered a specific impact variable.[15] The most powerful statistical test, ANCOVA, took account of the possible influence of other factors. These factors, called moderating variables,

15 That is, by borrower (or saver in the case of SEWA).

Box 3: Key Moderating Variables Used in the ANCOVA Analysis to Test Impacts

India	Peru	Zimbabwe
All Levels - Number economically active household members - Household size - Trade - Age - Marital Status - Educational attainment - Religion/caste - Employment Status	*Household level* - Number economically active household members - Number income sources - Annual household income - Age of respondant - Housing tenure - Number of students in the household - Dependency ratio in the household *Enterprise level* - Enterprise sector - Gender of entrepreneur - Proximity to a paved road - Type of business premise - Enterprise location - Premise owndership *Individual level* - Gender - Marital status - Presence of additional income earners in household - Annual household income	*All Levels* - Number of economically active household members - Number of Income sources - Poverty group - Whether household had experienced a financial shock related to illness or death in the last two years - Gender

included the age of the respondent, marital status, educational attainment, religion, employment status, trade, household size, and number of economically active household members.

The main threat to the validity of findings from this analysis is selection bias. The AIMS team paid considerable attention to minimizing the threat that self-selection would bias the impact assessment results. The main method used was to include an extensive list of moderating variables in all analyses, as shown in Box 3.

The AIMS studies depart from classic quasi-experimental research in that client sample respondents became clients some time before the Round 1 survey was conducted. In Round 1, therefore, the participant and control groups should be similar to each other in characteristics that are not affected by program participation, such as age, marital status, and religion. They may, however, differ significantly with respect to the hypothesized impact variables (e.g., household income, enterprise revenue, food consumption, educational participation by children in the household, etc.). When impact is measured through ANCOVA, the downward bias created by the presence of impact in the data from Round 1 may tend to offset the positive effect of selection bias.

The case studies included an analysis of the resources and activities and the financial and risk behavior of selected client households and their enterprises. They also included a comparative study of the case study households and their enterprises. Key questions guided both parts of the analysis:

- How have the resources and activities of the households changed over time?
- What risks have the households faced and how did they cope?
- What investments have they made, and how did they finance these investments?
- What has been the impact of microfinance services on the case study respondents, their economic activities, and their households?
- What has been the impact of microfinance on their ability to cope with risks?

V. MAIN FINDINGS

We begin by summarizing some descriptive findings from the three country studies. Then we report the results of the tests performed to measure impact at the household, enterprise, and individual levels.

A. DESCRIPTIVE FINDINGS

In India, survey respondents and their families draw on an average of 2.6 income sources. Informal sector activities contributed over 70% of total income in Round 1. This includes earnings from microenterprises (39.9% of total income), casual labor (20.6%), and sub-contracting (10.0%). Semi-permanent employment and salaried jobs, both primarily male activities, brought in 17.4% and 11.5% of household income respectively. Men earned 60% of household income, women 40%. Among borrowers, annual household income in Round 1 averaged \$1,408. The averages for savers and non-clients were \$1,107 and \$981 respectively. Only 41% of the women in the panel reported that own-account microenterprise was their primary economic activity. Own-account activity was more common among borrowers (46.6% of the total) than among savers (42.3%) or non-clients (34.0%).

In the two-year interval between surveys, the average household income of panel members increased substantially in real terms. For the entire sample, the rise averaged 13.9%. Borrowers were able to boost their average incomes by 16.2%, while savers managed an even higher percentage increase (17.3%) and non-clients experienced a smaller 6.8% rise. Income from microenterprise rose modestly during this period while income from sub-contracting fell. The largest contributors to increasing household income were salaries and semi-permanent employment. Incomes earned by survey respondents in their primary economic activities increased by only 5.4%. Income from street vending rose strongly while earnings from garment making and bidi rolling, the other two important trades for SEWA members, declined.

Credit and savings patterns in sample households suggest that loans from SEWA Bank supplemented, but did not displace borrowing from informal sources. SEWA Bank borrowers borrowed about as much from informal lenders as other households in the sample. No one in the sample had much access to credit from other banks, so SEWA Bank provided "additionality" in access to institutional credit for households in the sample. Average financial savings were small. SEWA members kept three-fourths of their financial savings in SEWA Bank accounts. Various forms of informal savings were also popular, but there was little saving in other banks or in securities.

In Peru, households averaged slightly more than three income sources in 1997. In real terms, average annual household income for both clients and non-clients scarcely changed between 1997 and 1999. Only new entrants to the ACP/Mibanco program may have experienced a slight rise in household income. Enterprise revenue in sample households was virtually constant in nominal terms, both for all the household's microenterprises and for the respondent's primary enterprise.

Crime, illness, death, divorce, job loss, and sudden business reversals are just some of the shocks that Lima's microentrepreneurs experience. In 1997, 44% of households reported at least one shock in the previous two years; clients suffered significantly more shocks than non-clients. In the 1999 survey, this figure rose to 57%, primarily because of income losses reflecting the negative economic climate during this period.

Households in the Zimbabwe sample averaged 2.6 income sources per household in 1997. For continuing clients of Zambuko Trust, average household income was significantly higher in 1997 than the average for departing clients and non-clients. Between 1997 and 1999, the average household income of continuing clients fell in real terms while the averages for the other two groups increased. Nevertheless, continuing clients continued to have the highest average household income of the three groups.

> **An Unprecedented Crisis**
>
> An estimated one-quarter of the adults aged 15-49 in Zimbabwe are HIV/AIDS infected. Overall, an estimated 1.5 million adults and children were infected by the end of 1999. Deaths due to AIDS were estimated at 130,000 in 1997 and 160,000 in 1999. Some 624,000 children under age 15 are estimated to have lost their mother or both parents by the end of 1999 (UNAIDS and WHO 2000).

Fifty-nine percent of respondents in the 1997 survey in Zimbabwe had faced at least one financial shock in the preceding two years. In the 1999 survey, this number rose to 75%. The most common shocks were the serious illness of a household member (often related to the HIV/AIDS crisis, which respondents were reluctant to discuss) and crises requiring financial assistance to non-household members, followed by the death of a household member.

B. Impacts on Households

At the household level, the AIMS field studies analyzed variables that reflect a multidimensional view of poverty and well-being. They focused on the impact of credit on:

- Levels and sources of household income
- Ownership and expenditure on household assets
- Enrollment ratios for school age children and expenditures on education
- Expenditures on certain items of food
- Strategies for coping with financial shocks.

The three studies show the highly dynamic nature of low-income households and the complex ways they respond to downward economic pressures and financial shocks, as well as to opportunities. The studies confirm that the impacts of microfinance at the household level are conditional and heterogeneous. There are positive impacts for some variables among some groups in some settings and neutral impacts for others. Below, we identify some patterns in the findings.

1. Overview of findings

In two of the three countries there were positive impacts on the level of household income (total and per capita): diversification of income sources, expenditures on housing improvements and durable goods, boys' education, and expenditure on food by the poor.[16] Crosscutting findings were the limited impact on girls' education and the smaller-than-expected impact in improving strategies for coping with financial shocks after they occur.

The India study found stronger impacts at the household level than at the enterprise level. Household income (total and per capita), expenditure on housing improvements, expenditure on consumer durables, and school enrollment for boys were all positively affected. Participation in SEWA Bank also had some impact on food expenditure and the ability to cope with shocks.

The Zimbabwe study found positive impacts on the diversification of household income for clients who did not take a loan between the two survey rounds, but not for continuing clients. The study also found positive impact on the ownership of some durable assets for repeat borrowers. The enrollment ratio of boys was boosted in all types of households, but not that of girls. There were positive impacts on the consumption of meat, fish, chicken and milk for extremely poor households, although none on the consumption of eggs. The Zimbabwe study found no impact on strategies for dealing with risk, but this is attributable to the positive strategies most households used to start with.

In Peru, the range of household level impacts was narrower than in India and Zimbabwe. There were strong positive impacts on household income (total and per capita) and on intergenerational launching. Microcredit also helped client households diversify their income sources. There was no indication of impact on household assets. The study did not find positive impacts on children's education expenditures. It found that clients on average experience more shocks compared to non-clients and those who do experience shocks were more likely than non-clients to sell assets to cope with them. However, this is a very small group.

The three studies found that participation in microfinance programs helps poor or extremely poor households meet basic needs and protect against risks. In Zimbabwe, for example, participation in Zambuko helped extreme poor clients meet basic needs related to education and food consumption. The study found significant positive impacts on their ability to send boys to school and to purchase nutritious food items. In Peru, the study found that impacts on poor clients are generally consistent with those for the full sample, with especially strong impacts on household income and setting up a dependent in his or her own enterprise. It also found that microcredit helps poor client households maintain their desired level of diversification. However, when faced with a financial shock, poor clients were more likely to turn to (negative) asset reducing strategies compared to their non-client counterparts.

2. Increasing income and assets

Microcredit improves the ability of households to respond to opportunities as indicated by survey findings showing positive impacts on household income levels, diversification of household income, and expenditures on and ownership of physical assets. A further indicator is the positive impact in Peru on "intergenerational launching", the process by which microentrepreneurs set up younger household members in their own

16 See Boxes 4, 5, and 6, below, for summaries of findings at the household, enterprise, and individual levels for all three countries.

businesses. These survey findings are backed up by qualitative data showing how clients use microfinance to increase and smooth household income and build assets. Taken together, the findings suggest that microfinance can improve the ability of clients to respond to opportunities.

Increased income is important for households and can translate into improvements in other aspects of household welfare. Even when household income does not increase, households can still benefit in other ways from microfinance.

Household Income. The India and Peru studies reveal positive impacts on household income. The Zimbabwe study did not. In Peru, the impact involved higher enterprise income. In India, participation raised income from all informal sector sources as well as from microenterprise. In both countries, real income per household rose between survey rounds for client as well as non-client groups. In Zimbabwe, average real household income declined for continuing clients while rising for departing clients and non-clients as increases in nominal income failed to keep pace with inflation (see Table 2).

Table 2: Changes in Income Measures Between the Study Rounds

	Income Measures	Round One	Round Two	Percent Change
India	Annual household income*	1998	2000	
	Borrowers	1,408	1,636	13.9
	Savers	1,107	1,298	17.3
	Non-Clients	981	1,048	6.8
	Number of income sources per household			
	Borrowers	2.8	2.6	
	Savers	2.6	2.4	
	Non-Clients	2.6	2.4	
Peru	Annual household income*	1997	1999	
	Borrowers	8,587	8,906	3.7
	New Borrowers	5,826	6,420	10.2
	Non-Clients	5,638	5,954	5.6
	Number of income sources per household			
	Borrowers	3.3	3.3	
	New Borrowers	2.7	3.0	
	Non-Clients	2.8	3.0	
Zimbabwe	Annual household income*	1997	1999	
	Continuing borrowers	5,037	4,932	-2.1
	Departing clients	3,284	3,999	21.8
	Non-clients	2,715	3,800	40.0
	Number of income sources per household			
	Continuing borrowers	2.6	2.7	
	Departing clients	2.2	2.7	
	Non-clients	2.2	2.5	

*Reported annual income in local currency deflated to base year prices, then converted to US dollars by dividing by base year exchange rate.

Income Diversification. The studies found conditionally positive impacts on diversification of household income. One factor limiting impact was that most households were diversified to start with. The Zimbabwe study found increased diversification for departing clients but not for continuing clients, who were more diversified to start with. There was no impact on diversification for extremely poor households.

The Peru findings are consistent with several ideas about diversification. Households with higher incomes may be less concerned with income variability than households with lower incomes. Income diversification is an optimal strategy for poor and vulnerable non-poor because it allows them to manage the risk of income fluctuations. Specialization is an optimal strategy for higher income households because it allows them to maximize their household income.

In Peru, there was limited impact on diversification for the overall sample, but important differences emerged when the sample was divided by poverty level. Better-off client households maintained lower levels of diversification than their non-client counterparts, while poor clients maintained higher levels of diversification than non-client counterparts. These findings are consistent with the basic idea that households with higher incomes may be less concerned with income variability than households with lower incomes. Income diversification is an optimal strategy for poor and vulnerable non-poor households because it allows them to manage the risk of income fluctuations. Specialization is an optimal strategy for higher income households because it allows them to maximize their household income.

Household assets. Microcredit has a mixed impact on household assets. The AIMS studies focused on housing improvements and selected durable goods appropriate to each setting. While the studies revealed interesting and dynamic patterns of household asset accumulation, impacts varied by country, type of asset, and other client characteristics. The country-level findings illustrate how the poverty level of clients, their age, number of loans, and the economic climate can influence patterns of asset accumulation and impact.

Box 4: Summary of Household Level Findings

Household income level (total and per capita)	Positive impact in India and Peru, but not in Zimbabwe.
Household income diversification	Increased diversification in Zimbabwe and among the poor in Peru. No impact on diversification of either borrowing or saving in India.
Housing improvements and durable goods purchases	Positive impact on both housing and durable goods among repeat borrowers in India. Positive impact on durable goods but not housing in Zimbabwe. No impact on either in Peru.
School enrollment for boys (India and Zimbabwe)	Positive impact in India and Zimbabwe.
School enrollment for girls (India and Zimbabwe)	No impact.
Private expenditure on children's education (Peru only)	Negative impacts among new entrant households.
Expenditure on food by the poor	Some positive impact in Peru and Zimbabwe. No impact in India, except slight impact for repeat borrowers.
Ability to cope with shocks	Small positive impacts in India, no impacts in Zimbabwe and small negative impacts in Peru.

Despite the higher wealth levels in Peru, this study found no quantitative impacts on household asset acquisition.[17] The recession resulted in a sharp drop in spending on housing improvements and household appliances among respondents between 1997 and 1999. Households that spent more in 1997 made the greatest reduction in asset expenditures, indicating the discretionary nature of these purchases. Expenditures on housing improvements were related to household poverty level (the non-poor

17 The case studies, however, indicate that credit facilitates housing investments, both directly and indirectly by raising enterprise revenues, which are then used for housing improvements.

spent more), enterprise location (marginal-zone enterprises spent more), and household tenure (households with secure tenure spent more). Households with greater wage income also spent more on housing improvements. All evidence suggests that housing is a critical, multi-purpose investment for entrepreneurial households in Lima; the slowdown between 1997 and 1999 is undoubtedly temporary.

In India, the AIMS study found positive impacts on some household assets for some groups. There was a positive impact on spending for housing improvement among all borrowers. Further analysis showed that borrowers who took multiple loans spent significantly more than members of the control group, not only on housing improvements but also on appliances and transport equipment, suggesting the importance of multiple loans and sustained program participation for building assets. The emphasis on housing expenditures among clients relates to the need for repairs in old Ahmedabad housing and/or the fact that many homes are also used as workplaces. It also may reflect the life cycle stage of respondent households. As members reach middle age and the number and ages of household members increase, respondents may want to secure old age support by providing a home to sons and their families.

The Zimbabwe findings show a low standard of living and material wealth for most households. The study did not find statistically significant impacts on the amount spent on household asset because the range of values in the statistical was very wide. However, removing the outliers from the analysis revealed a significant positive impact for Zambuko participation on asset expenditures for clients who joined the program before 1997 and had multiple loans. When acquisition of specific household assets was analyzed, the results suggest a positive impact of Zambuko on continuing clients acquiring stoves and refrigerators. There was no impact on the purchase of fans, television sets, means of transport, or housing improvements. The Zimbabwe study also found that one-fifth of all respondents sold assets between 1997 and 1999, and that continuing clients were more likely to do so than departing clients or non-clients. Among those selling an asset, half sold

Housing + Credit = Productive Asset

Martina and Mario envision their home as a diversified commercial center housing a mix of enterprises including their store, a restaurant, rental rooms and a hostel. To date, they have used enterprise revenue and loans from their cooperative to complete five rental rooms. These now generate income that has helped them to pay bills and relieve pressure on the primary enterprise (a home-based grocery store). The restaurant is still in the idea stage, though they are contemplating the purchase of furniture on credit from a nearby carpenter. They are now in the process of saving for new improvements and hope to finish the second-floor roof when they are eligible for a new loan from their cooperative. This step will enable them to finish several more rooms and move them closer to their dream of constructing a third–floor hostel. They do not invest ACP/Mibanco loans directly in housing improvements. They prefer to use loans from their cooperative for this purpose, and reserve their ACP/Mibanco loans exclusively for inventory. By focusing ACP/Mibanco loans solely on their enterprise, they are able to generate sufficient revenue to cover household needs, repay ACP/Mibanco, and make payments on their housing improvement loan from the cooperative. Martina and Mario's house represents their future; as they use both income and credit to improve it and develop its income-generating potential, their long-term economic outlook improves.

in order to upgrade and 40 percent sold an item because they needed the money. This suggests the important role of assets when people need a lump sum of money, not only among clients but among others as well.

The Peru study examined impacts on intergenerational launching and found that client households are more likely to launch a son or daughter in a business. Among client households with similar levels of income, enterprise fixed assets, and educational expenditures, borrowers were 62 percent more likely to report the launch of a child or minor dependent in his or her own business. Intergenerational launching was positively associated with length of time in the program. Households in which women manage the primary microenterprise were one-third more likely to report a launch than households in which men managed the primary enterprises.

3. Improving children's education and food consumption

Capabilities are embodiments of human capital that have implications for people's ability to raise their living standard. Related AIMS indicators at the household level are education of children and nutrition status as reflected in food expenditures. The findings reveal positive impacts on boys' education in India and Zimbabwe (but not Peru), and some impact on food expenditures for poor households in Zimbabwe and Peru (but not India, except for repeat borrowers).

Children's Education: Enrollment ratios were already high in Peru (almost 100% for all ages) and Zimbabwe (over 90% for ages 6-16). In India they were lower, but still over 80% for girls and boys 5-10 years old, over 50% for girls 11-17 years old, and 65% for boys in this older age group. Gender differences in enrollment ratios were small in Zimbabwe and Peru, but larger in India, especially among children 11 to 17 years of age (55% for girls and 65% for boys in 1997).

The Indian study found a positive impact on boys' enrollment ratios but not on girls'. The boys' enrollment ratio at the secondary level increased from 65 to 70%. There was no significant impact on the enrollment of girls at the secondary level or of girls or boys at the primary level. The case studies revealed several reasons why SEWA members may not invest their marginal gains in education. Educating a child beyond the 9^{th} grade involves considerable costs and can yield few returns. Strong social and market constraints appear to limit the returns on education, especially for girls.

The Zimbabwe study also found positive impacts on enrollment ratios for boys 6-16 years old, but not on girls' enrollment in that age range. By 1999, 99% of boys in client households were enrolled, compared to 94% for non-clients. For girls 6-16 years, school enrollment ratios declined between 1997 and 1999; Zambuko did not help keep girls' enrollment up. A possible reason for declining enrollment is that girls are more likely to drop out to care for the sick.

The Peru study looked at changes in education expenditures rather than enrollment ratios because almost all children were in school to start with and because increases in education expenditures are indicative of increases in educational quality. The analysis revealed no impact on education expenditures among continuing borrowers, but found some evidence of lower expenditures among new entrants (clients who took their first loans between 1997 and 1999). This drop in expenditures could be a temporary impact, since longer-term borrowers do not reduce their education expenditures. Overall, expenditures on education increased, even as expenditures on food and assets dropped. Apparently, respondents place a high priority and value on education. The high enrollment ratios for all children suggest that clients are investing in girls and post secondary education.

Expenditures on food: Some positive impacts on food expenditures by poor households were found in Peru and Zimbabwe, but not in India.[18] All three sites showed a downward trend in expenditures on food by clients and non-clients alike. In Peru, the overall reduction in food expenditures was driven by a reduction among non-poor households, who probably cut back on higher priced food in response to declining economic conditions. Per capita food expenditures actually increased by 5% for poor client households in the sample. In Zimbabwe, the downward trend in food expenditure was probably a cash management strategy for coping with the rising cost of living. Zambuko participation had a positive impact on the consumption of meat, fish, chicken, and milk for extremely poor continuing client households. In India, the decline in food expenditures was slightly less for borrowers, but it was unclear why it fell for any group since incomes increased. Participation in SEWA Bank did not stem the decline in food expenditures.

4. Managing risks

Credit and savings play important roles in household and individual strategies to manage risk. Life cycle events such as births, marriages, children's education, and funerals; unexpected shocks such as fire, theft, illness, and loss of an income earner, and other economic stress events require large, lump sum expenditures. To manage risk, people protect against the chance of a financial loss ahead of time and use different strategies to cope with losses resulting from financial shocks after they occur. Credit and savings can be help clients protect against risks ahead of time by:

- Diversifying their sources of income to smooth income and consumption.
- Building a solid and mixed base of physical, financial, human, and social assets that can be drawn upon in times of need.
- Improving money management by encouraging savings and maintaining access to multiple sources of credit where possible.
- Empowering women by strengthening their participation in economic activities and decision making.

The findings discussed in this and following sections show the important role of microfinance in supporting these protective strategies.

18 Exception: there was a near-significant relationship between food expenditure and the number of loans ever taken by borrowers.

The AIMS surveys show that respondents in all three settings experienced a wide range of financial shocks between 1997 and 1999, but only a few people used negative, asset reducing, strategies to cope with these shocks. Most drew on savings, income flows, or help from friends and neighbors. In some cases, people worked longer hours or reduced household expenditures to meet the associated financial demands.

In India there was a small but positive impact among borrowers, with a shift away from asset-reducing strategies among respondents who faced a financial shock. Since fewer than 10% of households used asset-reducing strategies for dealing with shocks in 1997, the scope of impact was limited. The SEWA study found that the key financial shocks for informal sector households in Ahmedabad were illness, experienced by 60% of households, and marriage, experienced by 20% of households. Marriage was the most expensive shock, serious illness the most common, and death of a breadwinner the most devastating. Over 70% of households in the sample experienced one or more shocks in both rounds of the survey.

Coping With Divorce

After her divorce, Ms. Mlanga and her four-year old son were left with very few household assets: a bed, small wardrobe, two-plate electric cooker and push tray. She received her first Zambuko loan in May 1997 and later that year acquired a cassette player, using profits from her enterprise. In April 1998, she bought a wardrobe on a three-month lay away plan and gave her old one to her niece. When the wardrobe was paid off, she purchased a kitchen cupboard on similar terms. She also bought a paraffin stove when she moved into a two room rental unit without electricity. In mid 1999, again on a lay away plan, she bought a kitchen table with four chairs. She acquired all of these items from profits from her enterprise plus money earned working in a hair salon. She didn’t have much after her divorce but since joining Zambuko she has been able to buy her own property and care for herself and son.

Zimbabwe survey data indicate no impact on strategies for dealing with risk, again mostly because very few people used asset depleting coping strategies to start with, leaving little scope for further reduction. The study found that serious illness, death, and assistance to other households were the most common shocks and the use of savings and income flows the most likely coping strategies. The number of households reporting shocks increased from 59% in 1997 to 75% in 1999.

The high incidence of HIV/AIDS has magnified the importance of assistance to others in Zimbabwean household finance. Aid to non-household members has been a normal part of social obligations to parents, family members, and close relatives, especially those in rural areas, where the flow of income tends to be irregular. Continuing client households were much more likely than non-client households to give assistance to non-household members in both 1997 and 1999. Funerals of siblings, adult children, and extended family members were all too frequent. Households assist others with funerals by providing money or in-kind assistance such as purchased food. ANCOVA suggests that Zambuko has a positive impact on the level of funeral-related assistance that continuing clients provide to non-household members.

Households in the Peru sample were less vulnerable to shocks than those in India or Zimbabwe. Only 44 percent of households reported a shock in 1997, but this increased to 57 percent in 1999 as the economy declined. Reduction or loss of an income source replaced robbery as the key financial shock. Households in Lima coped with shocks by borrowing, using savings, reducing other household expenditures, and working longer hours. The use of asset reducing strategies was rare. The study found that households that received microcredit were more likely to experience financial shocks, and more likely to use asset-reducing strategies, than other groups.

Although the three AIMS studies suggest that credit and savings may play a greater role in helping clients protect against risk ahead of time than in directly coping with shocks and emergencies after they occur, they also indicate that coping strategies are mostly informal and still inadequate.

C. Impacts on Enterprises

The first place many people look for impact from a microfinance program is the primary enterprise operated by the borrower. Participation in a microfinance program is expected to raise revenues, fixed assets, and employment in that specific microenterprise. Although some studies look no further than the primary enterprise for impact, fungibility provides a compelling reason for searching more widely. By enlarging the pool of household resources, loans can lead to increased expenditure in a number of areas beyond the primary enterprise. Borrowers may opt to invest in an enterprise other than the one for which they took the loan. Alternatively, they may not invest in microenterprises at all. Additional resources may flow into the household as well as, or instead of, the enterprise.[19]

Table 3: Major Financial Shocks for AIMS Study Participants

	Major Shocks	**% of HouseholdsAffected by Shocks**
India	Illness, Marriage	70% (both rounds)
Peru	Loss of household income, robbery	44% (1997) 57% (1999)
Zimbabwe	Illness, death, assistance to other households	59% (1997) 75% (1999)

Another reason to look beyond the respondent's primary enterprise is to understand the use and impact of savings, as well as how credit and savings interact in household financial strategies. Because SEWA Bank and some other microfinance providers and promoters believe that the impact of savings may be as important as that of credit, the Indian research team evaluated SEWA Bank's savings services as well as its loan services. Yet, another point is that many MFIs lend for a variety of stated purposes. Unlike ACP/Mibanco, Zambuko Trust, and other institutions that stress enterprise lending, SEWA Bank regards enterprise development as only one possible justification for extending credit. One might therefore expect its activities to have less impact at the enterprise level and more at the household and individual levels.

AIMS assessed impacts on microenterprise revenues, fixed assets, employment, and transactional relationships. Revenues and fixed assets were examined separately for the respondent's primary enterprise (usually the

19 In the old world of microfinance, this prospect was often regarded with horror. Enterprise uses were equated with investment, while household uses were regarded as consumption. The fear was that if loan proceeds were not invested, they would not generate the means for repayment and the microcredit system would falter. Yet not all investments yield high returns, or any returns at all, while some household uses – for example, spending to improve the education and health of children in the household – are appropriately regarded as investment. For these reasons, the issue is less clear-cut than was once believed.

one for which the respondent obtained microcredit) and all microenterprises in the household.[20] In the Indian case, because many respondents did not run microenterprises, the study also considered impacts on income from all informal sector activities.

Microenterprise revenues: In India, borrowing from and saving in SEWA Bank both had positive impacts on the informal sector earnings of respondents and their households, including income from sub-contracting and casual labor as well as from microenterprise. Participation also raised income from all household microenterprises. There was, however, no evidence that either form of participation raised the revenues of the respondents' primary microenterprises.

Among respondents with microenterprises, borrowers earned higher revenues on average than savers or non-clients but large variations within each group made the cross-section differences in means statistically insignificant. Those who sold vegetables or fruit enjoyed higher revenues, other things equal, than those in other sub-sectors.

The number of loans ever taken from SEWA Bank had no significant effect on any measure of microenterprise revenue or informal sector earnings. This highlights the important differences between SEWA Bank and MFIs that primarily emphasize enterprise development.

Because 1997-99 was a difficult period for microenterprises in Peru, the values of most impact variables remained stagnant or fell over the two years. There is some evidence that microcredit helped to protect ACP/Mibanco client enterprises from negative pressures. Participation appears to have had a positive effect on gross revenues from multiple (up to three) microenterprises. Evidence for an impact on the respondent's primary enterprise is less strong. Even after outliers are removed from the data set there is no statistical evidence that microcredit raises the gross monthly revenue earned by the primary enterprise.

In summary, participation in ACP/Mibanco had some positive impacts on microenterprise revenue during a period when revenue was generally stagnant. The results indicated that the use of microcredit led to positive impacts on

Box 5: Summary of Enterprise Level Findings

Enterprise net revenue	No impact on client's primary enterprise revenue in India, Peru, or Zimbabwe. Positive impact on household's combined enterprise revenue in Peru and India; also informal sector income in India. No impact in Zimbabwe.
Enterprise assets	Positive impact on enterprise assets of clients' primary enterprise in Peru. No impact on client's primary enterprise assets in India or Zimbabwe. No impact on combined enterprise assets in any of the three studies.
Enterprise employment	Positive impacts in India and Peru. No impact in Zimbabwe.
Enterprise transactional relationships	Some impact in each place, but the nature of the impact varied from case to case.

20 Data were collected on up to three microenterprises in the household; the smallest enterprises in households with more than three enterprises were therefore ignored.

combined enterprise revenue for both borrowers and new borrowers. The magnitude of the impact on annual enterprise profits was estimated to be US$ 1,000 for borrowers and US$ 740 for new borrowers.

The Zimbabwe study considered the combined impact of Zambuko's microcredit and business training on the net revenues of microenterprises. Net revenues from the primary enterprise declined in real terms between 1997 and 1999 for all groups in the sample. Borrowing from Zambuko had no significant impact, although extremely poor departing clients did marginally better than non-clients in 1999. ANCOVA found no relationship between participation in Zambuko and monthly net revenue from up to three enterprises.

Microenterprise fixed assets: The AIMS studies found a positive impact on enterprise fixed assets in Peru, but not in India or Zimbabwe. Entrepreneurs in Peru slowly accumulated enterprise fixed assets between 1997 and 1999. Participation in ACP/Mibanco had a positive impact on assets in the clients' primary enterprises, which increased in value by $500 more than those of non-clients. There was no statistical evidence, however, that microcredit had an impact on asset accumulation for the combined enterprises associated with the household.

The primary microenterprises and sub-contracting operations of women in the India sample used very little fixed capital. No definite impact of participation in SEWA Bank on the microenterprise fixed assets used in the respondents' primary enterprises could be discerned, perhaps because of questionable data.

In Zimbabwe, although continuing clients hold more valuable microenterprise fixed assets than departing clients or non-clients, statistical tests could not verify that microcredit had an overall impact on their value, either in the respondent's primary enterprise or in up to three microenterprises in the household. The analysis did find a positive impact on total household enterprise assets for clients who had taken more than one loan before 1997 but did not take an additional loan after the 1997 interview.

Microenterprise employment: The AIMS studies assessed the impacts of microfinance on enterprise employment by analyzing both the number of hours worked in household microenterprises in the week preceding the survey and the number of days worked in the previous month. Employment was defined as time worked by the proprietor, other family members, and hired workers from outside the household. The Peru and Zimbabwe studies also looked specifically at impact on the employment of non-family members, a rare practice in India.

Flexible Financial Glue

Though loans from ACP/Mibanco are central to her financial management practices, Laura also relies heavily on *juntas* (rotating credit and savings associations) and loans from a communal bank. Laura usually uses loans from ACP/Mibanco to purchase inventory. The inventory is sold and generates revenue that is used to participate in *juntas*. For Laura, *juntas* are all-purpose funds that she uses to cover a range of household expenditures and investments, including housing and enterprise improvements, fixed assets, inventory, and loan payments. The *junta* serves as a kind of flexible financial glue, filling the holes that loans cannot. Laura participates in two *juntas*, one weekly and one daily. The daily one is small and is used to cover household consumption needs. The weekly one is larger and is used for the enterprise, consumption, or to make payments on her loans. If Laura does not need to use the *junta* to pay off a loan, she uses it for inventory or to buy fixed assets. The flexibility of the *juntas* makes it easy for her to employ them in a complementary and efficient way, aligning disbursement dates with payment dates or other times when she needs lump sums of cash. Laura has skillfully combined formal and informal sources of finance to build up her home-based general store in Lima.

In India, the own-account enterprises and sub-contracting operations of women in the sample employ very little labor beyond the respondent herself. Nevertheless, participation in SEWA Bank's financial services, particularly as a borrower, does seem to lead to some modest employment creation. Being a client of SEWA Bank increased employment by both of the measures used, but nearly all the additional labor was supplied from within the household.

In Peru, the statistical results indicated that microcredit had a positive impact on overall employment as well as on the employment of non-household members. Enterprises in the study experienced stable or declining levels of employment between 1997 and 1999, yet during the same period the level of non-household employment and value of wages paid both increased. Households receiving microcredit were able to maintain higher levels of employment, employ more non-household members, and pay more in wages than non-client microenterprises.[21]

In Zimbabwe, participation in Zambuko's program was not found to be significantly related to employment in either the primary enterprise or in up to three household enterprises. The lack of an effect on paid employment is likely to be associated with the use of unpaid household labor. It may also be associated with the decrease in the real value of the net revenue of the primary enterprises of continuing and departing clients, as well as with the decline in the real value of the net revenue of up to three enterprises in continuing client households.

Transactional relationships: The AIMS studies posited that access to microfinance would change not only the levels at which entrepreneurs do business but also the ways they do business. The studies tried to measure several types of transactional relationships. All three studies examined the types of suppliers used; retailers, wholesalers and producers; the types of customers served; retailers, wholesalers and producers; the types of business premise occupied; home-based; formal; informal, and whether the business premise was owned or not. The Peru study also asked whether a written sales contract was used, while the Zimbabwe study considered the amount of out-of-town sales, the extension of credit to customers, and the keeping of written business records.

The assessment in India suggested that SEWA Bank's financial services improves transactional relationships with suppliers, making clients more likely to deal with wholesalers, factories/manufacturers, and middlemen/intermediaries, rather than households or retailers. The tests did not reveal any impact on clients' transactional relationships with customers. The quantitative measures and tests of the hypotheses regarding transactional relationships were somewhat rough, and the actual impact of participating in SEWA Bank may be greater than the tests indicate.

In Peru, microcredit appeared to have a positive impact on the incidence of business premise ownership as well as providing entrepreneurs with the flexibility to buy inputs in more advantageous ways. Both the survey and case study findings indicate positive impacts of microcredit on input supply relationships for commercial sector enterprises. Case study respondents consistently stated that microcredit permitted the clients to buy in bulk for lower prices, take advantage of special sale prices on inputs, and choose from a wider range of input sources.

21 "It is difficult to say why client households were turning to more use of hired labor in their microenterprises. One possible explanation is that entrepreneurs and their family members may have been choosing to work less. However, a separate analysis of the data revealed that there were no significant changes between 1997 and 1999 in the number of hours worked by each worker. Instead, it appears that microcredit may be allowing entrepreneurs to maintain and increase the scale of their operations to a greater degree than for non-clients, this requiring more workers than are available in the household." Dunn and Arbuckle (2001), p. 118.

The Zimbabwe study examined the location of the respondent's main business premise and asked whether she sold outside the town of residence, extended credit to customers, and kept business records. It found that continuing clients were significantly more likely than others to sell outside the town in which they reside. Zimbabwean respondents sell almost exclusively to final customers, who often ask for credit. Most of the respondents supply credit selectively to their customers, sometimes only after a deposit has been paid. Continuing clients are significantly more likely than others to provide such credit.

The business training provided by Zambuko is reflected in the extent to which clients keep business records. In 1997, clients were significantly more likely than non-clients to keep business records. By 1999, more non-clients were keeping business records, but they were still less likely to do so than clients.

In general, the findings at the enterprise level are weaker than might have been expected, particularly in India. The Indian findings can be attributed to contextual factors such as the severe over-crowding in Ahmedabad's informal sector and the socially constrained occupational segregation that affects SEWA Bank's exclusively female clientele.[22] SEWA's Union engages in activities that may benefit all women in specific trades, regardless of whether they are members of SEWA or clients of SEWA Bank. That some of these activities clearly benefit all women in a given trade or occupation, not just SEWA members, bears consideration. In such instances, there may be no measurable differences between clients and non-clients in terms of impact.

THE RIGHT TO TRANSACT BUSINESS …
MORE THAN JUST CREDIT

"The police used to harass us a lot. They would take away our vegetables. They would take away our bundles. Since we joined SEWA, they have stopped harassing us…Raju-ben (SEWA Union organizer) informs SEWA that these people are being harassed. Then, the people stop harassing us. No police or anyone else harasses us now."

Because India experienced faster economic growth than Peru and Zimbabwe, it may seem surprising that enterprise-level impacts were lower there than in the other two sites. Weak enterprise-level impacts in India seem to be explained by who the clients are, what they do, and the fact that the most promising growth activities lie outside their socially defined realm. The economic growth experienced in Ahmedabad, Gujarat, and India generally has not translated into improved business opportunities for women in Ahmedabad's informal sector. The impact of borrowing from SEWA Bank may also be limited by the inflexibility of the single credit instrument that the Bank offers (see further discussion below).

More enterprise-level impact was found in Zimbabwe and Peru. This supports the expectation that a microfinance program's impact will bear some relationship to the program's goals and structure. ACP/Mibanco and Zambuko emphasize lending for microenterprise development, while SEWA Bank does not. Yet the Peruvian and Zimbabwean programs were operating in economically adverse environments during the periods on which the impact assessments are based, while India in 1998-2000 experienced substantial economic growth that was shared even by the poor and near-poor households in our sample. While some impact of a defensive nature was detected in Peru and Zimbabwe, the negative environments in those two countries during the study period could have reduced the impact of the microfinance program, particularly at the enterprise level.

22 Gender and caste are important influences on an individual's employment opportunities in India. A man's caste strongly influences the range of occupations open to him. For a woman, caste also determines whether she is allowed to pursue gainful employment at all.

All three studies find less impact on the respondent's primary enterprise than on microenterprises in the household in general. This suggests that borrowers exploit the fungibility of microcredit to increase the combined profits from all enterprises associated with their household economic portfolios and frequently use the additional resources provided by borrowing for purposes other than enterprise development. Information from the case study informants suggests that resources devoted to enterprise development are often used to increase working capital. This permits entrepreneurs to hold larger inventories, buy in bulk to take advantage of lower input prices, and thereby increase sales.

Formalization of microenterprise has been an issue in Peru, where both national and local authorities have tried to bring informal enterprises into the formal section. Pressures to formalize have affected entrepreneurs in several ways. Those who are willing and able to take the risks associated with formalization no longer need to spend time and energy evading the authorities and may become eligible for credit from a wider range of providers, particularly banks. On the other hand, they have to pay taxes and fees that reduce profits. For those unwilling or unable to navigate the complex web of regulations and restrictions, staying informal has become increasingly difficult. Although such entrepreneurs save money by avoiding taxes, they must spend time, energy, and bribe-money to prevent being detected, fined, relocated, or even shut down. Microcredit may have promoted licensing with the municipality, but it seems to have had no impact on tax registration. All the entrepreneurs in the case studies say that they have been affected by government efforts to bring informal enterprise into the system, but the sample survey shows little change in the level of formalization between 1997 and 1999.

D. Impacts on Individuals

At the individual level, the three AIMS studies focused on aspects of empowerment, especially of women. An important dimension of empowerment is the ability of people to participate in decisions that affect their lives, especially their economic lives. The studies explored the proposition that by increasing an individual's ability to contribute economically to the household, participation in microfinance programs strengthens their control over household resources, self-esteem, and ability to deal proactively with the future.

Analysis at the individual level drew on both the survey findings and the case studies. Many issues related to control over resources, self-esteem, and preparedness for the future are difficult to capture in survey data; attempts to do so were only modestly successful. Because many respondents already had high levels of participation in decision-making, self-esteem, and sense of preparedness for the future, several of the survey measures were too insensitive to capture significant changes. The case studies therefore played an important complementary role in assessing the role of credit and savings in increasing these aspects of women's empowerment.

The results from Peru on individual level impacts were mixed. Positive impacts were found on clients' feelings of preparedness for the future. The case studies confirmed that clients were generally optimistic and future-oriented, as reflected in their use of loans for investments in home improvements, new businesses, and business improvements. The findings on self-esteem were neutral, but self-esteem among some clients may have been undermined by stress-related pressure to repay loans. An important finding from Peru relates to women's control over household resources: while cooperative decision-making is the norm, women are significantly more likely to exercise independent control over decisions related to loans and enterprise revenue than men. They also save more consistently than male entrepreneurs. This applies equally to client and non-clients and did not change as a result of program participation.

In Zimbabwe, clients actively participated in decisions about taking loans, using loans, and using enterprise profits. Joint decision making increased during the study period. Even though the program did not have a savings component, clients were more likely to have an individual savings account and extremely poor clients to save in more ways than similar non-clients. The case studies confirm that participation in a microfinance program can lead to greater self-esteem and self-confidence and enhance a client's ability to plan for the future. They suggest that self-esteem and self-confidence are associated with the ability of clients to manage their enterprise, meet the financial demands of the household, and acquire assets.

As in Peru and Zimbabwe, women in India who participate in SEWA are more likely to have personal savings accounts and take specific steps to prepare for the future. Borrowers from SEWA Bank participate actively in decisions regarding whether to borrow, how to use the loans, and how to use increases in enterprise revenue, if any. SEWA Bank participants do not seem to have more positive perceptions of themselves than other women, or to be more optimistic about the future. One reason the study did not find more significant changes at the individual level is that many working class women in Ahmedabad have been economically mobile and active participants in household economic decision making for a generation. Thus, the scope for SEWA Bank to increase their mobility or participating economic decision making is limited. The case studies suggest that participation in components of SEWA's program other than financial services affects impacts at the individual, enterprise, and household levels.

An important individual-level finding across the three studies is that women take an active, sometimes dominant, role in decisions to take a loan, use the loan, and use microenterprise profits. While many women (one-third to two-thirds, according to the studies) make these decisions independently, married women commonly make them jointly with their husbands. In no case did women forfeit their role in decision making during the study period. Rather, they tended to shift back and forth between independent and joint decision-making. This challenges some previous microfinance impact studies that suggest male household members are more likely than women borrowers to control these decisions, while women must assume the responsibility and pressure to repay loans. The AIMS studies find instead that women are empowered not only through the process of making independent decisions regarding loans and enterprise profits but also by participating more actively with their husbands and other household members in joint economic decisions. In fact, the case study findings suggest that women sometimes lose out and become more vulnerable when independent decision-making creates high levels of intra-household conflict.

SAVINGS AND CONTROL

An important measure of individual financial control is whether a woman has savings in her own name. SEWA Bank clients can be clearly distinguished from other working class women in Ahmedabad in this regard, since all of them, whether they borrow or not, have savings accounts in the Bank. By contrast, few members of the control group had individual savings accounts. Instead, they kept their savings in traditional forms such as cash hoards and rotating credit societies.

Impacts on decisions to take the loan, use the loan, and use resulting enterprise profits. There was limited impact on these variables across the studies because the proportion of clients taking part in these decisions was high in Round 1 and remained high in Round 2. In all three studies, women were active participants in these decisions already, as either independent or collaborative decision makers. There tended to be a shift towards collaborative rather than independent decision making between the rounds, but this was not seen as negative. In India, women did not distinguish between their own interests and those of the household, but several respondents did draw a line between the interests of their own nuclear family and that of their husband's or their own extended families. In Peru, unfavorable economic conditions led to increased intra-household cooperation, especially when men lost wage jobs and joined their wives in microenterprise activities. In Zimbabwe, the shift toward more consultation and joint decision-making reflected financial pressure due to the rise in the cost of living and increase in ratio of economically dependent household members, rather than program participation *per se*.

Personal savings. In all three studies, clients were more likely than non-clients to have personal savings. The Zimbabwe study found that Zambuko had a positive impact on savings. In Peru, within the context of an overall decline in savings, ACP/Mibanco participation did not impact either the incidence or pattern of savings. The study revealed that the overall decline in savings in the sample was due to a significant drop for men, but not for women. In India, all SEWA Bank clients have their own savings accounts while few other working class women in Ahmedabad do.

The AIMS field studies examined changes in self-esteem and self-confidence by considering respondents' perceptions of the importance of their own economic contributions to their household, as well as perceptions of increased respect from others within the household.

Perception of one's own economic contribution to the household. While the case studies consistently document high self-esteem among clients, the survey data did not find strong impacts in this area, primarily because self-esteem (measured by perceived economic contribution to household) was high to start with and remained high over the course of the study. In India, the study found a slightly positive impact for savers, but none for borrowers. In Peru,

Enterprise Development and Empowerment

Prior to joining Zambuko, Mrs. Lepani's husband had overall say on how the household's primary income, his salary, was used. As her enterprise grew, however, she took control of decisions about how money was used. Now, she plays an active role in household economic decision making by discussing, making suggestions, and influencing her husband.

The income from Mrs. Sitole's business has played an increasing role in meeting household expenses since taking a Zambuko loan. As her husband's business has been losing customers, her enterprise profits are covering expenses his income used to cover. Prior to joining the program, she and her husband would consult each other on financial matters but he tended to control the outcome. Nowadays, she has more influence on joint financial decisions and independently makes decisions to take loans.

Mrs. Jongwe joined Zambuko about the time her husband lost his job. She started out producing and selling peanut butter, but this did not work out. Her efforts to sell sewn goods in South Africa were more successful and her husband joined her in this enterprise. As the primary income earner in her household and a good business manager Mrs. Jongwe has gained power and influence in household financial decision making. While her husband used to have the 'upper hand' and 'final say', now they draw up their household budget together and jointly decide how to use enterprise profits.

there was a small negative impact, in the sense that control group respondents were more likely to have had a positive change in their responses between 1997 and 1999. However, the client group retained a very high rate of strongly positive responses reflected their perceived importance of their economic contributions. The exception here was among new entrants, who had a slight decrease in positive responses. This suggests that pressure to make timely payments on loans can cause stress and lower self-esteem for some when they first borrow.

Perception of increased respect from others. Almost all respondents, clients and non-clients alike, report that other household members value their economic contributions. In India, there was a small positive change in perceived respect from others, primarily for borrowers. In Zimbabwe, the economic contributions of respondents to their households were highly valued and there was no difference between clients and non-clients. In Peru, there was no evidence of impact on this variable on treatment group clients, but there were limited indications that microcredit may have has a limited negative impact on new entrants. This suggests that borrowing may initially strain interpersonal relationships within the household, but that this pressure decreases over time. New entrants may initially feel they are shouldering a burden not appreciated by others in the household, but over time clients adjust.

Future orientation. One facet of empowerment is feeling prepared and taking action to deal with the future. The AIMS studies considered the impact of program participation on this variable by looking at changes in attitudes and actions regarding the future. Does participation in a microfinance program help clients feel more confident and prepared? Does it result in more proactive behavior? In India, most respondents felt prepared to deal with the future and were already taking lots of steps to prepare for the future. There was little scope for program impact. The Zimbabwe study found a huge increase in respondents who, alone or with other household members, were doing something to plan for the future. This reflects the growing economic crisis between 1997 and 1999. Zambuko participation did not necessarily have an impact, but everyone was doing more to prepare for the future. In Peru, the use of microcredit may have led to positive impacts on client's feelings of preparedness for both client groups, but especially among new entrants. The study concludes that the use of credit may lead to a boost of confidence for ACP/Mibanco clients, though it acknowledges that other factors may have played a role.

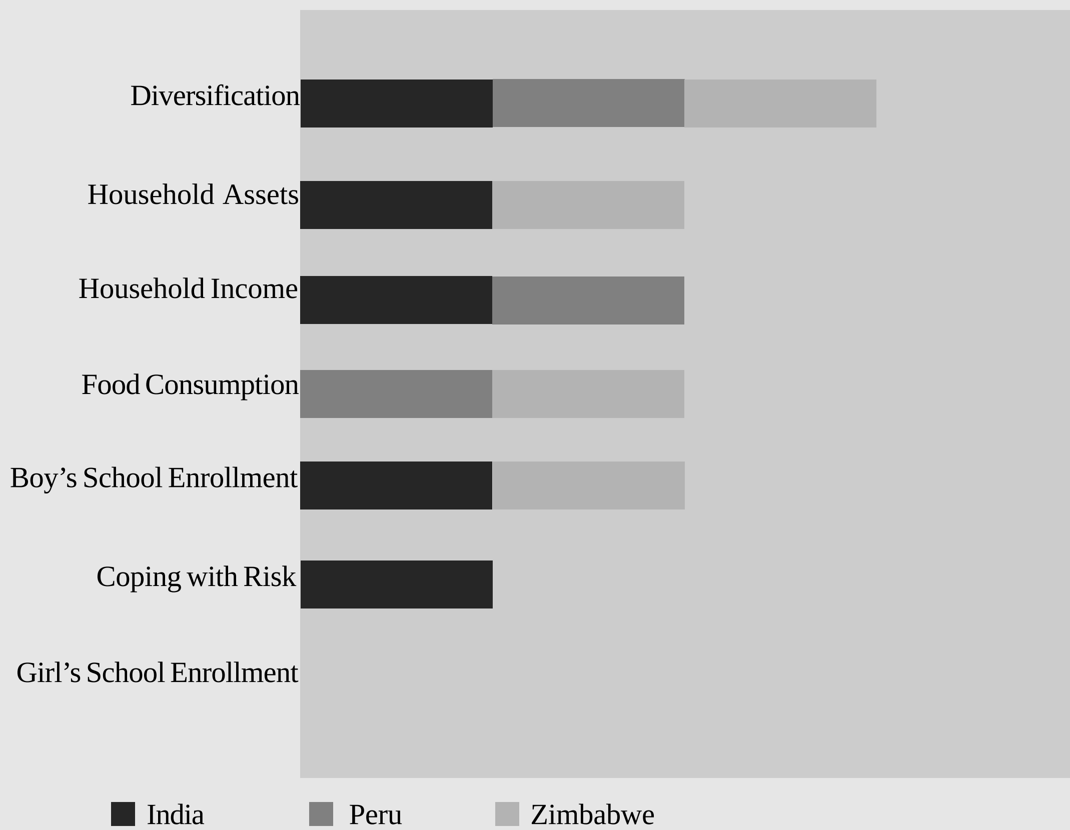
E. SUMMARY OF FINDINGS

In general, the India study found relatively strong impacts at the household level and weaker ones at the enterprise level. The Peru study found strong impact at the enterprise level, but less impact at the household level. Finally, the Zimbabwe study found somewhat less and more conditional impacts than the other two studies at both of these levels. In all three sites, it proved difficult to measure significant impacts at the individual level although the case studies provided many examples of impact on individuals.

1. Overview of impacts at three levels

Overall we conclude that microfinance does make a difference, however its impact is neither consistent across countries nor across domains. At the household level, use of microcredit benefited household income in India and Peru but not in Zimbabwe. It encouraged diversification of income sources in Peru and Zimbabwe,

Figure 2: Areas of Positive Household Level Impacts by Country



but not in India. It led to limited increases in expenditure on household assets: repeat borrowers spent more on both housing improvements and consumer durables in India; clients as a whole spent more on durables, but not on housing improvements, in Zimbabwe. Food consumption by the poor was positively impacted in Peru, to a small degree, and Zimbabwe. Except, perhaps, for repeat borrowers, food consumption was not affected in India. In India and Zimbabwe, school enrollment was promoted for boys, but not for girls Households in the studies, particularly those in India and Zimbabwe, suffered frequent and varied financial shocks. However, the assessments found limited impact on the ability to cope, except for a slight increase in coping ability in India.

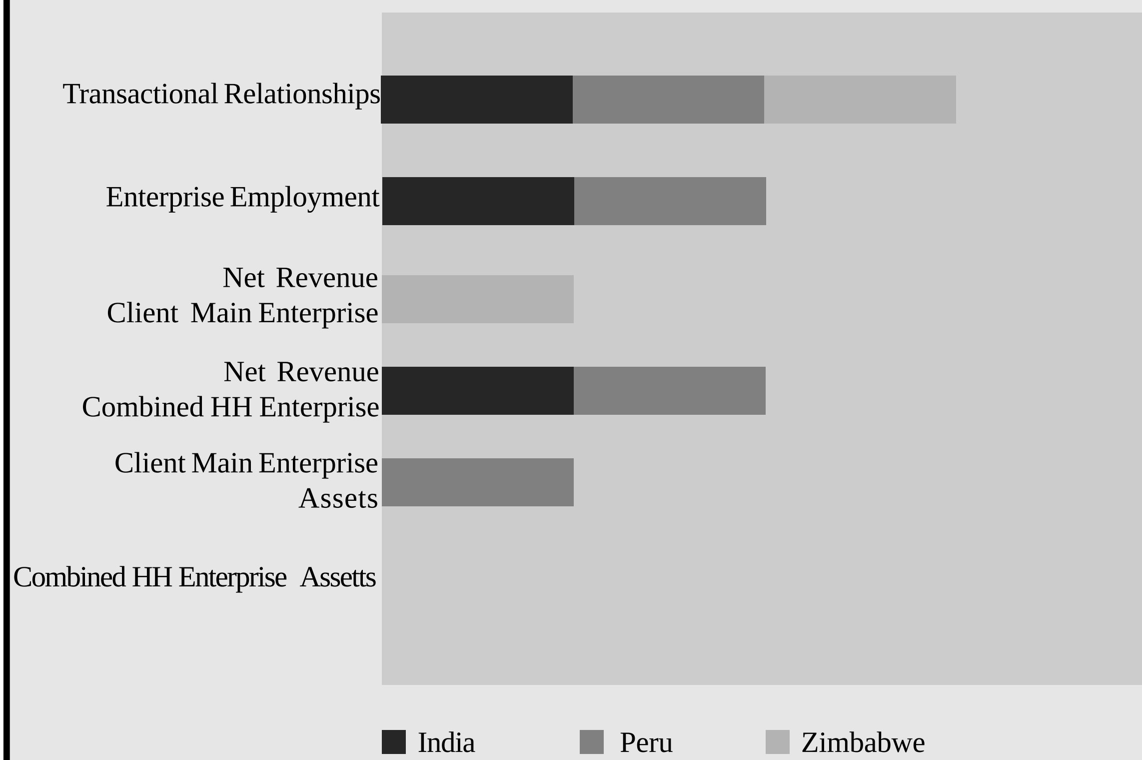
At the enterprise level, microenterprise revenues in India and Peru benefited significantly from microfinance. In India, where many respondents were not microentrepreneurs, the finding extended to all forms of informal sector earnings. In Peru, use of microcredit led to positive impacts on enterprise net revenues in spite of a general fall in microenterprise revenues caused by a recession during the study period. No impact on net revenue was found on the clients' primary enterprises in India, or on combined household enterprises in Zimbabwe.[23] The expectation that borrowing would help clients build up their microenterprise fixed assets was not strongly supported by the studies. The only significant impact on these assets that was found pertained to respondents' primary enterprises in Peru, and even there the build-up of assets was slow.

23 The exception is the primary enterprise of poor clients who left the program during the study period.

Microenterprise employment, although small in absolute terms and generally limited to family members, was significantly impacted in India and Peru, while no such impact was found in Zimbabwe. Transactional relationships proved hard to measure but limited impacts were identified.

Individual level impacts were also hard to quantify and test statistically. In India and Zimbabwe, household Zimbabwe study found significant impact on the ways clients saved. Since all SEWA Bank clients already

Figure 3: Areas of Positive Enterprise Level Impacts by Country



had savings accounts, it was not possible to test impacts on the incidence of savings. Values such as preparedness for the future, self-confidence, and self-esteem were probably promoted by microfinance services, but it could not be proven statistically. The case studies were more revealing at this level and generally found positive impacts.

While the AIMS studies found that the use of financial services by low-income households is associated with improvements in the values of most of the impact variables specified in the hypotheses, no single impact was found uniformly in all three countries. The heterogeneous and conditional nature of the microfinance impacts is reflected in Boxes 4, 5, and 6.

2. Impacts of microfinance on poorer clients

The studies establish that people from poor households do participate in microfinance programs and benefit in a number of important ways. There was limited evidence that participation in microfinance programs has a negative impact on these households, except perhaps extreme poor households that are highly indebted. Nevertheless, the modest impacts experienced by poorer households in the study samples suggest scope for doing more to improve the relevance of products and services for this group. For the purpose of this analysis, extreme poor were defined as households that fell under the $1/day per capita consumption poverty line. Because very few clients in Peru were in this category, the analysis of impacts on poorer households focused on those that fell under Peru's LSMS (Living Standard Measurement Study) definition of poverty.

Participation by clients from extreme poor households: There were far more clients from extreme poor households in India and Zimbabwe than in Peru. As seen in Figure 1, the participation levels of extreme poor in SEWA Bank and Zambuko Trust corresponded closely to the overall proportion of extreme poor in the population. ACP/Mibanco had proportionately fewer clients from households under the $1/day measure than in the overall population, but among ACP/Mibanco's approximately 30,000 active clients, as many as 1,200 fell below this extreme poverty line. Using the LSMS measures, approximately one-third of ACP/Mibanco clients in the sample could be classified as poor according to Peruvian standards.

Key areas of impact for poorer clients: Despite the relatively small net changes in household poverty levels, the Zimbabwe study found that microfinance had significant impacts on extreme poor clients. Participation in Zambuko's program is closely associated with extremely poor clients sending a higher proportion of their boys aged 6-16 to school. Moreover, net revenue from household microenterprises of the extreme poor fell less for clients than for non-clients. Training and loans apparently helped Zambuko clients cope with pressures on their enterprises.

The Peru findings indicate that the type of microcredit provided by ACP/Mibanco can have positive impacts on the poor, but many of these impacts are somewhat smaller than for non-poor clients. At the enterprise level, findings for poor clients were generally consistent with the results for the entire sample with a few exceptions. At the household level, the findings for the poor are generally consistent with those for the full sample. In the prevailing recession, poor clients were better able to maintain their existing levels of diversification while poor households without microcredit become less diverse.

There was one area of possible negative impact in Peru. Poor clients faced with a shock were 20 percent more likely to liquidate an asset in response to crisis than similar control households. Although this result pertained to the entire sample, the magnitude was greater for poor clients.

Amid much movement in and out of poverty, microfinance seems to have had very modest impacts on the overall incidence of poverty among clients. Yet it did help save some households from falling into extreme poverty and help propel others out of poverty.

3. Gender and impact

All the programs studied were designed and implemented with high levels of gender awareness. SEWA focuses exclusively on women's economic empowerment. Zambuko Trust emphasizes microfinance and business development but has an explicit aim of ensuring that women are equal recipients of loans and services. A majority of Mibanco's clients are women. To the extent that there are positive impacts at the household, enterprise, and individual levels in each of the three studies, the primary beneficiaries are women. More than three-fourths of Zambuko's clients are women.

The AIMS studies provide information on gender differences in the characteristics of study participants (in Peru and Zimbabwe) and informal sector workers (in India) that may affect impacts. For example:

- In Ahmedabad, a higher percentage of women than men work in the informal sector (80% versus 75%). Among women in the workforce, 70% work within their homes, compared to only 9% of men. Women are much more likely to be dependent producers and less likely to be own-account and wage workers. A high degree of socially defined occupational segregation restricts women's occupational mobility, and gender segmentation within occupations and trades also plays a role. For example, among independent garment makers, men specialize in men's garments and women specialize in women's and children's garments. Women within the garment industry have fewer days of work per year than men.

POVERTY IMPACTS?

- In Zimbabwe, program participation enables clients from extremely poor households to better meet basic needs, but movement into and out of poverty appears to be more associated with household size and structure rather than microfinance.

- In Peru, microcredit has similar impact on poor and non-poor clients, but poor clients experience many of these impacts on a somewhat smaller scale. The evidence also suggests that microcredit has a positive impact on movement out of poverty. For households starting with the same poverty level, the same number of income sources, and the same number of economically active household members in 1997, treatments households were six percent more likely to be above the poverty line by 1999. This is a net change of six percent: Some households may have dropped below the poverty line, while other rose above it.

- In India, 53% of sampled households lived below the $1-a-day poverty line in 1998, 34% lived between the $1 and $2 poverty lines, and the remaining 13% were only slightly better-off. Almost by definition, therefore, program impacts benefit the poor. During the study period there was modest net improvement in the poverty status of sample households, but many households fell back into poverty or sank from moderate into severe poverty at the same time as many others advanced. Some SEWA Bank borrowers rose out of poverty but others fell to severe poverty. Savers made slower but more steady progress.

- In Peru, the study found a close relationship between gender and the sectors in which micoenterprises operated. Women took more part in commercial enterprises and participated less in industrial and service enterprises. Most commercial enterprises are located in the entrepreneur's home, leading to a high rate of premise ownership among women.

- Men in the Peru study earn higher enterprise revenues, own more enterprise fixed assets, and hire more non-household workers than women. In their transactional relationships, men have more fixed sales contracts, sell more often at the wholesale level, and license their enterprises at higher rates than women. Enterprises operated by women are more apt to be located in the disadvantaged marginal zones than those run by males.

- The Peru study found gender differences in borrowing and savings patterns during the study period. Women often start with smaller loans, but as they borrow and repay loans over time, their loan sizes catch up to those of their male counterparts. The incidence of savings for men dropped significantly between rounds while the incidence for women remained constant.

- In Peru, women and their husbands have similar levels of control over decisions affecting the use of credit and enterprise revenues. In fact, since women are more likely to work alone in their enterprises, they tend to have more managerial autonomy than the male respondents, who are likely to be working with their wives in a joint enterprise.

- The Peru findings indicate that male entrepreneurs have generally higher levels on many enterprise variables than their female counterparts.

The studies suggest other ways that gender is related to impact:

- Women's higher-level economic objectives are often related to the household rather than the enterprise. This may help explain why the AIMS studies found greater impact at the household level than at the enterprise level among many clients.

- In India and Zimbabwe, there were positive impacts on boys' education but not on girls'.

The Zimbabwe study found an important area of impact to be women's increased participation in economic decision-making. The case studies reveal that initially men make major household decisions in consultation with their wives. Women are responsible for decisions related to provision of food and children's daily needs. However, as a woman's income grows, this pattern shifts. Women begin to employ bargaining or negotiating skills within the household. This may result in conflict, but women pursue a strategy of conflict reduction to ameliorate the situation. For example, a wife may consult her husband to gain trust and confidence. Gradually, they reach a tacit agreement on a new pattern. Women do not always gain more independent control over proceeds of the enterprise; rather, they move towards more consultation and joint decision-making. The findings suggest that this shift is related to financial pressures, changes in household structure, and increases in the dependency ratio, rather than borrowing from Zambuko. Women often discuss whether to take a loan and what the loan money is to be used for with their husbands ahead of time. Once they have the loan, women assume primary control over management decisions.

Gender differences in impacts at the household and enterprise levels were fewer than might have been expected. There was some indication in Peru that the amount of impact experienced by women was somewhat less than that experienced by men, at least at the enterprise level. However, most differences in impact appear to be related to differences in the enterprise types, household structure, composition of economic portfolios, and economic goals of men and women.

4. The use and impact of microfinance in managing household and enterprise risk

The AIMS studies show various ways that low-income urban households manage risk in their household economic portfolios and use credit and savings in this process.[24] One important strategy to protect against risk ahead of time is to smooth income. A steady flow of income can preclude the use of more disruptive measures to meet consumption needs. Income smoothing involves diversifying income sources within the household economic portfolio to achieve different levels of variability.

Another risk management strategy is to build financial assets. Saving cash is one way to do this and the case studies reveal numerous examples of creative money management strategies that clients use to build financial assets. These involve inventive ways they keep money aside when it comes in, reduce what goes out, and store what is left over (Rutherford 2000). Some people keep extra money in less liquid savings instruments that are hard to get at. Others earmark savings accounts or income sources for particular purposes (health, dowry, buying land, building rental housing). Other strategies to improve money management include keeping written accounts; purchasing bulk food stocks and raw materials; and practicing family budgeting. Any of these can contribute to building a stronger base of household financial assets.

Managing risk also involves maintaining access to multiple sources of credit. AIMS respondents borrow mostly from informal sources at times of need. Maintaining access to informal borrowing systems involves frequent reciprocal borrowing; lending is a common protective strategy in all three countries. Keeping active in these networks provides a safety net for dealing with unexpected financial shocks. Clients also participate to some extent in informal insurance systems, such as funeral societies or other groups that come together to support people through life cycle and crisis events. Participation in these informal financial systems is part of the process

> HANG ON TO WHAT YOU'VE GOT
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> After attending Zambuko training Ms. Mlanga learned to budget her income and keep records of creditors.
>
> *"If I come back from selling, I do not go to SPAR [a large grocery chain] straight. First, I go home, sit down then take my pencil and calculate my Zambuko installment, rent, food and the money left for ordering supplies. In the past I did not do this, I would just spend the money. I did not have any knowledge of saving or how to budget money, I was just a person who would get money and spend it then eventually end up broke."*

24 Here risk is defined as the chance of a financial loss.

of building or solidifying social assets, which ensures access to informal sources of credit and other forms of support at times of need.

Building physical assets can play a role in managing household risk when these assets can be sold for a lump sum of money when it is needed. Physical assets such as food stocks, jewelry, consumer durables, and housing represent a store of value that can be drawn upon by sale or mortgage in times of need. In India, pawning or selling jewelry is a common way of getting cash. Having or building an extra room or house to rent is another potential source of income in times of need. In Zimbabwe, some households sold items such as stoves, refrigerators, fans or TV sets when they needed money. Human assets in the form of good health, education, and labor productivity also help protect against risk.

Individuals and households use a variety of strategies to manage financial shocks after they occur. These include reducing consumption by cutting back on food or other household expenditures, raising income by working longer hours, mobilizing additional household labor, or starting new business activities, or selling assets. They also engage in "personal financial intermediation" by taking loans, drawing on savings, or using informal insurance. As discussed earlier, asset-depleting strategies were seldom used. Microcredit played a relatively minor risk management role in these cases, given that none of the programs offered emergency loans.

The studies also show how microfinance helps individuals and households manage enterprise risks. Enterprise risks can relate to seasonality, vagaries of weather, natural disasters, and floods. Enterprises also face market-related risks such as price fluctuations and increasing competition. These sources of risk create uncertainties in

Box 6: Profiles of Debt

SEWA borrowers, India	৵ Average indebtedness comprises 27% of annual household income. ৵ Debt is mostly from informal sources or SEWA Bank. ৵ SEWA borrowers have as much non-SEWA debt as other groups. They don't usually use their loans to pay down other debts.
MiBanco borrowers, Peru	৵ Over half (58%) of Mibanco borrowers have other debt. ৵ Debt is fairly evenly split between formal and informal sources. ৵ Mibanco debt-to-household income ratio averages .34 for clients.
Zambuko Trust borrowers, Zimbabwe	৵ Fewer than 10% of Zambuko borrowers have borrowed from formal banks or other MFIs; about one quarter purchase assets through hire purchase schemes; most borrow informally from friends, relatives, and other individuals. ৵ Borrowers do NOT use informal borrowing for enterprise investment. ৵ Borrowing to deal with a crisis is mostly from informal sources.

the prices and volumes of inputs and their patterns of supply. They may also lead to fluctuations in market demand and uncertainty about the prices and volumes of goods and services. Other sources of enterprise risk relate to management of the enterprise: these risks include lack of market knowledge, accounting, or other skills. Still other risks are associated with hiring labor or investing in technology when new processes fail to work, equipment breaks down, or power supplies are interrupted. All these factors may affect the revenue of enterprises or the working and fixed capital it needs to run (Barnes 1996, Dunn, Kalaitzandonakes, and Vadiviaz 1996, Sebstad and Cohen 2001).

Microfinance helps microentrepreneurs protect against enterprise risks, primarily through diversification that reduces seasonal variations in income and through improvements in transactional relationships. Protective impacts included increased ownership of premises and some formalization of businesses in Peru. In Zimbabwe, Zambuko participation helped clients extend to markets outside the town in which they reside and improve their record keeping. In India, the AIMS study found that the financial services of SEWA Bank helped some clients improve their input supply links.

Microfinance can help clients cope with losses associated with enterprise risk by providing the means to rebuild or restock an old business, repair or renovate business premises, and repair productive assets. It also can help people start new businesses when old ones fall victim to structural risks. For example, a case study respondent from Zimbabwe experienced a large loss in her business, producing jerseys for export to Zambia. When the price of wool yarn rose in Zimbabwe, the price of jerseys fell in Zambia, and the exchange rate turned against her. Following this loss, she took a loan from Zambuko and experimented with several new products. She changed her business and now buys and sells poultry, ice pops, cooking oil, and second-hand clothes.

The risk of taking a loan: Does microfinance increase or decrease the risks associated with indebtedness? Taking a loan is itself a source of risk. All loans require regular repayments. If the returns on the investment financed by the loan are negative, or if the client experiences a shock that interrupts income flow, it may be necessary to deplete assets or reduce consumption to make loan repayments. This occurred in some of the case studies in all three locations. A client who defaults on a loan risks falling out of the financial market altogether, thus losing access to an important financial strategy. Clients may also deplete their social capital by asking friends and relatives for money to repay loans. Failing to pay may strain relationships with other members of the credit groups, erode social standing, and destroy goodwill. Defaulting on a loan also may cause loss of face, self-confidence, and self-esteem (Hulme and Mosely 1996; Zeller et al. 1997).

In India, borrowing from SEWA Bank does not reduce non-SEWA or total debt. Rather, it increases total indebtedness. While it certainly expands the range of options for poor households to deal with their financial problems and can help families achieve positive goals by raising household income, borrowing from SEWA Bank does not necessarily help extricate those households that have entered a vicious cycle of debt. While some SEWA Bank borrowers moved out of poverty or from severe to moderate poverty between the two survey dates, others sank to lower poverty groups. SEWA Bank savers made steadier progress out of poverty, although at a slower rate than the most successful borrowers.

In Peru as well, some case study informants used microcredit in a beneficial manner while others suffered some negative consequences. During the study period, repaying outstanding loans sometimes became difficult or even impossible. While asset-reducing strategies for dealing with financial shock are infrequently used by households in the Peruvian sample, households using microcredit increased their reliance on such strategies between 1997 and 1999. Borrowers may have less flexibility than non-borrowers in dealing with shocks because they were committed to making frequent and fixed loan repayments. This may have forced them to increase their reliance on asset liquidation.

In Zimbabwe, households may sell durable assets to raise cash when financial crises occur. One-quarter of the survey respondents reported selling at least one item in the 24 months prior to the 1999 survey. Only 40% of those who sold items reported doing so because they needed the money and only one reported having sold an item to repay a Zambuko loan.

Borrowing: A Key Financial Management Strategy

Among the 12 SEWA case study households, borrowing played an important role in meeting life cycle needs, dealing with emergencies, and taking advantage of opportunities. Borrowing comprised 25% of total medical expenditures, 19% of death related expenditures, 43% of wedding expenditures, 100% of business investments, 60% of housing investments, and 44% training expenditures. Money was not borrowed for rituals or celebrations.

VI. EMERGING THEMES

The differences in impact patterns among the three studies strongly suggest that the impacts of microfinance services are conditioned by factors such as the characteristics of the microfinance program, the context in which it operates, and the length of time clients remain in programs.

A. Program Context Makes a Difference

The contexts of these microfinance programs may have affected their impacts in many ways. All three sites are arenas of economic struggle, especially for the poor. In India, structural shifts in the regional economy have increased competition and crowding in Ahmedabad's urban informal sector. In Peru, economic growth is unreliable and there was a recession during the study period. Ahmedabad and Lima are both densely populated cities with large immigrant populations. In Zimbabwe, an economic decline that turned into an economic collapse has been accompanied by a devastating AIDS epidemic, creating an exceptionally difficult environment for the poor and the MFIs that serve them.

> **Social Norms: A Constraint to Impact**
>
> Social norms and institutions still govern many aspects of economic and political life in India today. A person's occupation or trade remains determined largely by her or his religion, caste, and gender. Religion and caste dictate what kinds of work particular communities or individuals do and whether women can work outside the home. Moreover, norms of female seclusion and dependence govern the location of women's work and their employment status as owner operator, self-employed, sub-contract, or casual wage earner. These social norms constrain the ability of individuals, especially women, to expand their enterprises or pursue more productive lines of work.

In general, the impacts of microfinance could be expected to be smaller when the economy stagnates or declines than when it grows. The benefits that people gain from borrowing and saving money depend on the uses they can make of these funds, and these in turn depend in large part on the opportunities offered by the local economy. When times are bad, opportunities to make positive returns on investments diminish while pressures to either borrow or draw down savings to meet mounting financial obligations increase. When investment opportunities decline, it becomes rational to take on less debt, and many borrowers react by reducing their demand for loans. Those who continue to borrow nevertheless may experience lower benefits from borrowing, or even learn that continuing borrowing leads them into an inescapable cycle of debt.

Like their clients, MFIs also face difficult decisions in hard times. If they maintain their previous standards of creditworthiness, they are likely to see a decline in their volume of lending. If they lower those standards, they may well experience a serious decline in their repayment rate.

Although impacts are likely to be lower in conditions of economic stagnation or decline than in conditions of economic growth, there may still be relative benefits for clients as compared to non-clients. Access to microfinance can be used defensively by microentrepreneurs. Some case study households reported increasing their working capital, buying more inventory goods at lower prices, and increasing their sales.

B. Program Characteristics Make a Difference

The specific services provided by MFIs also affect impact. SEWA Bank, for example, puts more emphasis on savings than on credit and also sells insurance. It offers a range of savings products including current, monthly, fixed, term, and recurring, and several savings collection locations; at home, in the neighborhood, or at the Bank. While SEWA Bank lends for various purposes, it offers one relatively inflexible and long-term loan product. Although repayments can be made from home or in the neighborhood to mobile SEWA Bank staff, all loan applications and disbursements are made at the Bank's head office in the newer, western side of the city. Although SEWA Bank is an important source of credit for its clients, who usually cannot borrow similar amounts elsewhere without incurring significant transaction costs, the existing loan product is not well suited either to meet emergencies or provide working capital. New loan products that target specific groups, such as flexible, short-term working capital loans for street vendors, might help meet additional client needs and expand the Bank's loan portfolio.

ACP/Mibanco and Zambuko Trust are more straightforward enterprise loan programs, although Zambuko combines credit with basic business training. Like SEWA, Zambuko makes relatively long-term loans, while ACP/Mibanco favors short turnaround times. These differences probably go far toward explaining why SEWA Bank's impact showed up mainly at the household level while ACP/Mibanco's impact was evident primarily at the enterprise level. The fact that Zambuko Trust had less estimated impact than the other two programs is probably attributable less to program characteristics than to the harsh economic, political, and health environments in which Zambuko was functioning during the study period.

Impact Where Impact Is Due

The results indicate that the type of microcredit offered by ACP/Mibanco between 1997 and 1999 helped to promote microenterprise development, even though it was most appropriate for commercial enterprises. The fact that the majority of clients managed commercial sector enterprises is a clear indication of the match between the credit technology and the enterprise sector. Clients' enterprises experienced numerous positive impacts, including higher revenues, higher fixed assets, and greater employment. These impacts were found despite the fact that the study was conducted during a period when enterprise revenues were generally stagnant and total employment fell.

C. Length of Time in the Program Makes a Difference

The length of a client's participation history in a microfinance program made a significant difference in the Peruvian case and also in India at the household level. The findings from Peru strongly imply that length of participation in the microfinance program matters. For almost all significant impacts, the magnitude of impact is positively related to the length of time that clients have been in the program. The longer a client borrows from ACP/Mibanco, the higher the level of benefits. Although borrowing from ACP/Mibanco initially increases the use of negative, asset-depleting strategies for dealing with financial shocks, longer participation does not increase the tendency to deplete assets in response to financial shocks.

For India, the benefits of long-term participation also emerge strongly at the household level, but they are not evident at the enterprise or individual level. The Indian case studies strongly suggest that the women who derive the greatest benefit from participation in SEWA Bank, and in SEWA generally, are those who have participated over the longest periods of time and who take part in the widest ranges of SEWA-related activities.

D. MAIN FINDINGS OF THE AIMS FIELD STUDIES

Generalizing from the three AIMS field studies is a challenge. The themes from each country presented in Box 7 show how similar questions generated quite different results in each place. Yet some important generalizations emerge from the study, with important implications for the industry.

> GIVE IT TIME…
>
> In the Peruvian study, length of time in the microfinance program is significantly related to increases in household income, net profits from all household enterprises, enterprise fixed assets, incidence of premise ownership, and incidence of municipal licensing. These results suggest that the longer a client borrows from ACP/Mibanco, the higher the level of positive impacts will be.

- According to a widespread assumption in the microfinance industry, borrowers invest loan proceeds in microenterprises and repay their loans out of the additional revenue generated by these investments. Instead, the studies found that clients frequently use the additional resources generated by borrowing for purposes other than microenterprise development, much less for the specific microenterprises cited in the loan applications, and repay their loans from various financial resources. Resources were highly fungible among a household's microenterprises, as well as among alternative uses at the enterprise and household levels: business inventories, enterprise fixed assets, housing, consumer durables, investments in human resources, and social expenditures. Impacts on the microenterprises for which credit was officially taken wereoften weaker than anticipated, while any other types of impact were identified in one or another of the country studies.

- MFIs are not the only source of financial services. Furthermore, households do not use their services in isolation, but rather in conjunction with instruments of informal finance and, if available, other formal financial services. How MFI credit is used depends in part on the array of available loan instruments and other formal and informal sources of finance. Nevertheless, MFIs significantly broaden the range of options open to microenterprises and poor households for responding to economic opportunities and coping with financial shocks. This is particularly true when, as is often the case, no other formal financial services are available to client households.

- Microfinance helps microenterprises prosper and grow, but its impact varies considerably among times and places, primarily because:

    - Economic, legal, and regulatory environments significantly influence outcomes, and these vary from site to site.

    - The goals and structure of each microfinance program are also important and varied. Different programs seek different outcomes, and to a considerable extent they achieve what they seek.

The influence of program and contextual factors on impact is demonstrated by the fact that no single impact was found consistently across all three of the country studies.

- Client households face different kinds and degrees of risk and have differing abilities to deal with risk. Common forms of risk are enterprise risks, life cycle events, emergencies, and structural factors. The financial and labor demands of dealing with risks can interfere with the enterprise growth and development that might otherwise be expected from expanded access to credit. They can also interrupt loan repayments and block sustained program participation.

- Microfinance serves the near-poor, the moderately poor, and even the extreme poor (households with less than $1 per day per capita in purchasing power). In other words, the programs studied reached many poor people and have impacts for poor people that do not differ significantly from non-poor clients. Microfinance does help some people escape poverty, but borrowing entails significant risk and the climb out of poverty tends to be slow and uneven. Over a time period as short as two years, some households move above the poverty line while others slip below it.

- Although the impact of microfinance depends in part on the economic environment in which services are provided, positive impact can occur in circumstances of recession or stagnation as well as amid economic growth. Microfinance services can help clients ride out hard times as well as participate in growth.

- Microfinance helps to reduce the vulnerability of client households by helping to ensure a steady flow of income, diversifying sources of income, and building varied assets. These changes increase the ability to deal with risks. This in turn helps position clients and other household members to take advantage of new, potentially risky, business opportunities as they present themselves.

- By supporting and encouraging women's economic participation, microfinance helps to empower women, thus promoting gender equity and improving household well-being.

VII. HOW CAN MICROFINANCE PROGRAMS IMPROVE IMPACT?

A. How Much Impact Can Be Demonstrated?

The impacts of microfinance services estimated in the AIMS studies are modest but significant. This finding is important for justifying investments in microfinance programs.

How much impact can be demonstrated? The amount of impact found in the AIMS studies must be interpreted in the light of one's prior expectations. The clichéd glass could be described either as half full or as half empty. The findings reported here will disappoint someone who approached this report with the expectation that microfinance can abolish world poverty. The net movements of households among the three global poverty groups over the two-year period of the study were small. While some households moved up the scale, others moved down. In India, where average household income rose, clients who saved with SEWA Bank but did not borrow during the study period moved up more steadily than those who borrowed. Some borrowers also moved up, but several fell lower into poverty, or even extreme poverty, suggesting that they may have borrowed out of desperation rather than to seize an economic opportunity. There was no dramatic movement of client households out of poverty over the two-year span of the study.

Box 7: AIMS Impact Themes

from India	Comparing SEWA Bank savers and borrowers, the savers were not necessarily poorer than borrowers. This is because some borrowers take loans in order to cope with financial stress, rather than to invest in their businesses or homes. This suggests that some borrowers may be more vulnerable to risks than savers. While some borrowers take SEWA Bank loans to repay other debts, SEWA debt is generally added to other debt.
from Peru	Mibanco client households combine financial services from several sources, but the terms of the program credit make it primarily useful as working capital for purchasing microenterprise inputs on more-favorable terms. This has positive impacts on enterprise performance, particularly on enterprise revenue, which leads to increases in household income for both poor and non-poor clients. However, poor clients and new clients experience some negative impacts, perhaps because the economic recession that occurred over the study period made loan repayment more difficult.
from Zimbabwe	In an inflationary environment, entrepreneurs have difficulty fending off the negative economic pressures on their enterprises and households. Some clients are likely to leave the program because they have difficulty repaying their loans and do not want to take on the high risk of indebtedness. Those who remain in the program are more likely to experience positive effects. The financial discipline acquired from repaying loans, combined with business management training, has a lasting effect on the ability of clients to manage their financial resources and meet financial demands. Participation in Zambuko enables clients from extremely poor households to meet basic needs more effectively, but movement into and out of poverty appears to be more associated with household size and structure than with microfinance.

The relatively modest quantitative findings, however, understate the dynamic nature of households, enterprises, and individuals. The findings from Zimbabwe on change in the poverty level of households illustrate this dynamism. The study reveals a lot of movement in and out of poverty but limited impact from program participation between 1997 and 1999. Among Zambuko's continuing clients, for example, the distribution across poverty groups stayed relatively constant between 1997 and 1999. Approximately one-fourth of clients were extremely poor, one-third moderately poor, and the rest (40%) were non-poor. However, among those who were extremely poor in 1997, 49% moved out of extreme poverty and were moderately poor or non-poor by 1999. At the same time, 43% of non-poor household in 1997 had fallen into either moderate or extreme poverty by 1999. There was tremendous movement between poverty groups. Qualitative study of the role of microfinance in helping some clients move out of poverty, in preventing others from falling in, and failing to help others in this respect, cannot prove impact, but it can suggest ways to improve program design.

B. Can Microfinance Programs Have More Impact?

Definitely. The AIMS studies suggest a number of ways to increase the impact of microfinance programs, especially on poverty. Most broadly, the positive findings on impact suggest that expanding services to more people will increase impact. While MFIs now reach larger numbers than ever before, in most countries their coverage of low-income households is still quite limited. Also, because impact is positively related to length of time in the program, microfinance programs can enhance impact by reducing turnover and retaining clients for longer periods of time.

An overarching strategy to expand outreach and reduce client turnover is to diversify products and services. There is considerable scope to expand the range of financial products and services that MFIs offer. The AIMS studies highlight wide differences in the characteristics of clients, their enterprises and households, and the contexts in which they operate. Yet the programs offer a relatively narrow range of financial products. Wide variation in the patterns of impact suggests that the products on offer suit some clients better than others. A broader and more relevant range of products and services could not only intensify short-term impacts but also keep clients in programs longer. Diversifying products and services and tailoring them to the varying financial service needs of individuals, enterprises, and households could attract larger numbers of clients. In turn, this could provide the basis for program growth, expansion, and more impact.

Client-level findings from the AIMS assessments suggest how a broader range of financial services could enhance impact. In India, we found that savings can have as much impact at the household level as credit. This points in the direction of active promotion of voluntary and flexible savings products through MFIs and other institutions. The studies also suggest that there is scope for products tailored to the financial service needs of households at different stages of the life cycle: savings products earmarked for events (marriages, funerals, or holidays); housing loans to help young people establish independent households; education loans; and life insurance.

Across the studies, low-income households frequently met emergency needs through informal borrowing. The inadequacy of these forms of borrowing indicates scope for introducing emergency loan product. The studies highlight the absence of informal social security systems and the unmet insurance needs of households. While insurance is complicated, there may scope for MFIs, in partnership with other institutions, to offer formal insurance products for the poor. Access to emergency loans could help poor clients avoid the need to deplete assets to meet emergency needs and at the same time keep up with loan repayments. MFIs might consider policies that allow loans to be rescheduled when poor households are hit by sudden and devastating financial shocks.

The AIMS studies suggest specific ways in which microfinance can do more to expand opportunities, improve capabilities, reduce vulnerability, and empower women.

1. Expanding opportunities

Microfinance can help expand opportunities by increasing income and assets, and by enabling people to take advantage of opportunities to generate income when they present themselves. Findings from the three studies suggest various ways that microfinance products and services could be improved to expand opportunities:

- *Increases in household income are driven largely by increases in microenterprise revenues*. This finding points to scope for greater emphasis on loan products that fit the financial needs of a wider range of household enterprises. For example, programs could consider loan amounts and terms that fit the shorter-term working capital needs of enterprises, or the longer-term investment capital needs. The standardized loan sizes and terms or group lending terms and conditions employed by many microfinance programs may not fit the needs of many types of enterprises.

- *Business and management training can be an important complement to financial services*, a possibility that remains to be explored in future work.

- *Complementary measures can be taken to reduce enterprise risk*. Some examples include further strengthening input and product markets: improving laws and regulations related to the tenure of business premises, promoting public investments in infrastructure or relocation of businesses to sites where infrastructure is stronger and more reliable, improving the security of enterprises and communities, improving and expanding the availability of property insurance, and simplifying business licensing.

- *Expand the availability of housing loans*. Investment in housing is a priority for many families. Most people build or otherwise acquire their homes in incremental fashion, adding to or improving the original structure over the years as needs change and circumstances permit. SEWA's experience with lending for home improvement is positive. Long-term mortgage loans are almost never available in developing countries for reasons related to titling problems and general economic insecurity. Even medium-term funding for home improvement is usually difficult to find. People want to invest in their houses because in many cases they are critically important assets that serve as a workplace as well as a residence. Rental units are also an important source of income for the poor in urban areas. A common way of adjusting to an economic shock is to rent out part of one's home or an out-building. Legal and regulatory reform to address housing tenure issues would necessarily complement increased lending for housing construction and improvement in most developing countries.

2. Improving capabilities

The AIMS studies found that microfinance has some conditional impacts on improving capabilities as embodied by human capital that enables people to maintain and raise their living standard. This is reflected in the findings related to impacts on the education of children and expenditure on food. It also relates to the assessment of impacts on Zambuko borrowers who participate in business training.

In Zimbabwe and India, there were positive impacts on boys' enrollment, but none of the AIMS studies showed that girls' education benefited from microfinance. To enhance impacts on girls' education, MFIs could consider education savings products marketed to support girls or short-term "seasonal" loans to meet demands for school fees and related expenses at the start of the school year. The positive experience of PACT's credit with education programs in Nepal and BRAC's Non-Formal Primary Education Program in Bangladesh suggest that microfinance can be used as an entry point and linked to broader community-based efforts to increase educational opportunities for girls.

The studies found small but positive impacts on household food consumption and/or expenditures for poor client households in Peru, and for extreme poor client households in Zimbabwe. These small impacts on food expenditure existed in the context of overall downward trends in food consumption/expenditure in all three settings. The findings suggest that reducing food consumption is a cross-cutting response to declining economic conditions. Moreover, when these limited impacts are compared to the more positive impacts on diversification of household income, the implication is that microfinance, by itself, may have more impact on smoothing income than on smoothing consumption. One way to improve impacts on the consumption of nutritious foods may be to use credit groups as a venue for providing nutrition education. The experience of Freedom from Hunger programs in several countries provides an example of this.

Findings from the AIMS assessments also suggest that the impact of microfinance on capabilities may be enhanced by complementing the delivery of microfinance services with training to enhance skills and knowledge related not only to business but also to education, health, and nutrition.

3. Reducing vulnerability

The three AIMS assessments firmly establish the "protective" role of microfinance. This supports similar findings from a number other microfinance impact studies (Hulme and Mosely 1996; Chua et al. 2000; Mosley 2000; Wright et al 2000; Zaman 2000; Sebstad and Cohen 2001). Microfinance reduces vulnerability by helping microentrepreneurs diversify their sources of household income, increase their savings, expand their options for credit, and improve household money management. For some clients, it also plays a protective role by helping to accumulate physical assets, increase expenditures on housing, and strengthen women's role in collaborative economic decision making. The positive protective role of microfinance is related to the fungibility of credit within households and the common use of credit beyond the enterprise.

Microfinance plays a more limited role in helping individuals and households cope with the financial shocks after they occur. This is related to the narrow range of loan products on offer, inflexibility in loan terms and conditions, and lack of emergency loans. It also relates to the limited emphasis of MFIs (not including SEWA) on savings and insurance products with risk protection in mind.

The three studies suggest several ways of improving microfinance products and services to help individuals and households cope with the financial shocks associated with life cycle events, emergencies, and other risks events.

- *Savings*: To help clients deal with risks and day-to-day economic stress, MFIs could offer a range of savings products that are not linked to borrowing. Savings should be available when needed. Deposit and withdrawal rules should accommodate the financial cycles of clients. Savings products also should also be designed to reduce client transaction costs to the extent possible. There appears to be scope for promoting less liquid savings accounts that encourage people to put money aside on a regular basis for anticipated life cycle events such as education expenses, holidays, marriage expenses, maternity expenses, and house construction or renovation. These savings could improve people's ability to deal with financial demands.

- *Insurance*: The delivery of insurance services is complex and may be beyond the capacity of most MFIs to provide directly. Yet, there is a great need to extend formal insurance services to low-income individuals and households to reduce their vulnerability. While many forms of insurance are available to higher income households, poor households are generally forced to self-insure against the same risks, or else to depend on informal insurance systems that usually are inadequate. Loss of an income earner can be devastating to a household, a fact which suggests a need for life insurance. Illness is a frequent occurrence that could also be mitigated through health insurance schemes, although it is a complicated form of insurance to offer. There also may be scope for property insurance against fire or theft. SEWA's experience with life and health insurance offers many lessons for providing insurance services.

- *Emergency loans:* When savings and income flows are inadequate, a common strategy for coping with a financial shock is to borrow. Most poor households rely on informal credit sources, which are expensive, often provide inadequate amounts, and frequently involve short repayment cycles. Pressure to repay these loans often compounds financial stress within households, rather than easing it. Among those who borrow from MFIs, the pressure to repay informal emergency loans can jeopardize their ability to repay their MFI loan. Emergency loans from MFIs can not only help clients, but also protect the MFI against the risk of default.

- *Flexibility in rescheduling loans*: One risk associated with taking a loan is that if household income flows are interrupted, a client may have to sell off productive assets to make the loan repayment. There was some evidence from Peru that poor borrowers were forced into this negative coping strategy when hit by repeated shocks. MFIs might consider policies that allow poor households to reschedule loans when they are hit by sudden and devastating financial shocks. This could help clients protect their productive assets, avoid default, and remain in programs. It could also help reduce the risk to the MFI's portfolio.

- *Shorter- term loans to "test the waters":* The Zimbabwe study suggests that the first loan is a test for some clients to see whether credit is appropriate for them. Among dropouts, over 60 percent had received only one loan. Shorter loan durations might reduce the risk of taking a loan for first time borrowers.

- *Variable rates of increase in loan size*: In Peru and Zimbabwe prompt repayment is rewarded with access to larger loans. Some borrowers, particularly in times of economic stress, prefer to either 'rest' or borrow at reduced levels. Giving clients options when taking out a subsequent loan may raise retention rates and lesson the risk of arrears.

4. Empowering individuals

The AIMS assessments related empowerment primarily to women, who comprise a majority of clients. Microfinance plays an important role in empowering women, primarily by supporting their economic participation. A basic premise is that economic participation is a foundation for other dimensions of empowerment. In addition to encouraging women's economic participation, the AIMS assessments found that microfinance also increases their role in economic decision-making, promotes personal/independent savings, and enhances future orientation.

SEWA's experience in promoting credit, savings, and insurance services in the context of larger efforts to promote women's empowerment suggests several ways that microfinance can play an ever greater role in promoting women's economic participation and empowerment, including:

- Continuing to focus on serving women clients.

- Expanding efforts to promote more appropriate products, independent savings, insurance and other forms of social security.

- Encouraging group lending and other forms of group organizing where appropriate.

- Complementing microfinance with other efforts to promote women's economic participation.

- Complementing microfinance with other forms of gender awareness raising and advocacy.

- Promoting women's leadership development through their participation in microfinance programs.

C. Some Basic Implications for Programs and Policies

For promoters and providers of microfinance, the AIMS findings offer a useful source of information about the consumers of financial services, both MFI clients and non-clients. Study findings provide information on the characteristics of consumers, the dynamics of their enterprises and households, their use of formal and informal sources of finance, and their patterns of indebtedness. They show that microenterprises increasingly are important as a source of income and employment for low earning households in many countries. They offer vivid evidence that MFI clients are not outside the financial system. Understanding the diversity of financial systems in which microentrepreneurs participate is important not only in understanding impacts, but in designing products and services that meet the needs and preferences of consumers. The studies also provide us with a picture of who does and does not come into the market. While the studies did not seek to explain the reasons for exclusion, this type of information would be very useful in expanding the outreach of MFI services. Adding questions to future impact studies that address this issue would increase the usefulness of these studies.

Indeed, the value of impact assessment in providing MFIs with systematic and reliable information on clients is only now being recognized. The emerging client-led microfinance agenda reinforces this need (Cohen, forthcoming). As has already been shown such data can be used to inform the design of new products and the promotion and refinement of existing products.

The AIMS studies help to address the question, *how can programs be improved?* Summarizing briefly from the earlier discussion, our major research-supported recommendations would be to:

- Improve products and services to keep clients in programs for longer lengths of time.
- Offer savings services as well as credit.
- Expand the outreach of microfinance services to more people.
- Expand the range of institutions involved in providing microfinance and related services.
- Offer a wider range of products and services, to the extent that these services are institutionally feasible.
- Fine-tune the design of existing programs by learning more about client's financial needs and tailoring products to meet those needs.

Until recently, most institutions viewed clients as statistics, primarily in terms of delinquency rates. Confronted with lower than desired performance ratios and evidence of increasing indebtedness of some clients, MFIs are increasingly aware of the value of tracking the impact on clients in tandem with institutional performance. The findings from studies such as these can inform the choice of indicators to be used in these tracking systems. Moreover, the richness of the information generated by impact assessments has created a demand for lower cost approaches to client assessment than longitudinal studies. The AIMS/SEEP Practitioner-Led Client Assessment Tools, also developed under the AIMS project, attempt to respond to this demand. Their adoption by networks across the globe attest to something that many financial experts have chosen to deny: donors are not the only ones who value impact assessments; MFI managers, staff, and governing bodies also find them a worthwhile investment.

For policy makers, impact assessments such as these provide a more solid basis for answering the question; should donors and governments promote microfinance? Briefly, they show that making financial services available to significant numbers of poor and near-poor people who work in the informal sector can have several positive impacts. These programs help their clients build their microenterprises, including secondary enterprises within the household, and they provide many other important benefits. The studies do not bear out the more extravagant claims made for microfinance – that they bring about fabulous growth in microenteprises, which then graduate to small, medium, or large scale; that these programs, all by themselves, lift large numbers of families out of poverty – but they do show that well-designed microfinance programs are enterprises worthy of support.

The studies also suggest how microfinance can be promoted more effectively by showing how impacts are conditioned by the structure of the program itself and the environment in which the program operates. Maximizing impact requires improved program environments and improved program structures. The governments of developing countries, with support from donors, are responsible for improving the operating climate for the microfinance sector. Among other things, they need to reduce the rate of inflation, remove the barries to operating a business and simplify legal and regulatory systems that stifle informal enterprise and interfere with the sustainability of MFIs.

The experience of SEWA Bank, ACP/MiBanco, Zambuko Trust, and other microfinance institutions demonstrate that microfinance can be made to work in low-income countries. Such settings do, however, involve higher levels of risk for clients and MFIs. As discussed above, microfinance in these settings may bear a heavy load because other protective mechanisms, such as insurance and social benefits, are absent. Development of these complementary systems would enhance the capacity of microfinance to make a positive difference in people's lives.

Box 8: The Usefulness of Impact Studies

For India

SEWA Bank has made program changes as a result of the AIMS study. They include:

- The introduction of a one-day loan to meet the credit needs of vegetable vendors;
- The offer of a special savings account designed to pay for marriage expenses; and
- The introduction of a financial literacy program to help SEWA members improve their personal financial management.

In addition, the Bank is reviewing the appropriateness of its products for workers in each of the major sub-sectors in which its members work. Consideration is also being given to the introduction of a loan to finance girls' education.

For Peru

The findings of the AIMS study

- informed the process of new product development following ACP/Mibanco's transformation to a full-service bank; and
- improved the Mibanco's understanding of its clients, their poverty levels and the financial needs of its clients.

The evidence from the study that Mibanco credit has important positive impacts is helping the Bank maintain its mission focus and communicate this mission to the public.

For Zimbabwe

The AIMS study contributed to product changes within Zambuko Trust.

- A compulsory savings program for borrowers has been introduced. Zambuko hopes this will improve loan security and enhance clients' ability to cope with financial shocks;
- Very short-term loans are being offered to its best clients to help them survive seasonal variation in the demand for their products;
- An emergency loan to help clients pay school fees and medical expenses is being pilot-tested;
- Loan insurance has been introduced to pay the outstanding loans of clients who die; and
- The possibility of introducing housing loans is being considered.

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Management Systems International
600 Water Street, S.W.
Washington, D.C. 20004-2488
Tel: (202) 484-7170
Fax: (202) 488-0754
www.msiworldwide.com